

THE PEOPLE'S BOOKS

## THE PROBLEM OF TRUTH



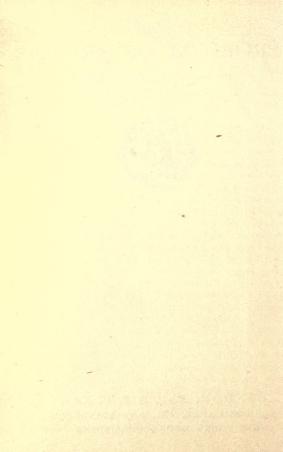
# THE PROBLEM OF TRUTH

## By H. WILDON CARR

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## PREFACE

A PROBLEM of philosophy is completely different from a problem of science. In science we accept our subjectmatter as it is presented in unanalysed experience; in philosophy we examine the first principles and ultimate questions that concern conscious experience itself. The problem of truth is a problem of philosophy. It is not a problem of merely historical interest, but a present problem-a living controversy, the issue of which is undecided. Its present interest may be said to centre round the doctrine of pragmatism, which some fifteen years ago began to challenge the generally accepted principles of philosophy. In expounding this problem of truth, my main purpose has been to make clear to the reader the nature of a problem of philosophy and to disclose the secret of its interest. My book presumes no previous study of philosophy nor special knowledge of its problems. The theories that I have shown in conflict on this question are, each of them, held by some of the leaders of philosophy. In presenting them, therefore, I have tried to let the full dialectical force of the argument appear. I have indicated my own view, that the direction in which the solution lies is in the new conception of life and the theory of knowledge given to us in the philosophy of Bergson. If I am right, the solution is not, like pragmatism, a doctrine of the nature of truth, but a theory of knowledge in which

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#### PREFACE

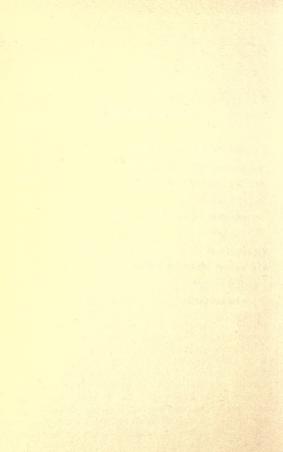
the dilemma in regard to truth does not arise. But, as always in philosophy, the solution of one problem is the emergence of another. There is no finality.

My grateful acknowledgment is due to my friend Professor S. Alexander, who kindly read my manuscript and assisted me with most valuable suggestions, and also to my friend Dr. T. Percy Nunn for a similar service.

### H. WILDON CARR.

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## THE PROBLEM OF TRUTH

#### CHAPTER I

#### PHYSICS AND METAPHYSICS

THE progress of physical science leads to the continual discovery of complexity in what is first apprehended as simple. The atom of hydrogen, so long accepted as the ideal limit of simplicity, is now suspected to be not the lowest unit in the scale of elements, and it is no longer conceived, as it used to be, as structureless, but as | an individual system, comparable to a solar system, of electrical components preserving an equilibrium probably only temporary. The same tendency to discover complexity in what is first apprehended as simple is evident in the study of philosophy. The more our simple and ordinary notions are submitted to analysis, the more are profound problems brought to consciousness. It is impossible to think that we do not know what such an ordinary, simple notion as that of truth is; yet the attempt to give a definition of its meaning brings quite unexpected difficulties to light, and the widest divergence at the present time between rival principles of philosophical interpretation is in regard to a theory of the nature of truth. It is not a problem that is pressed on us by any felt need, nor is anyone who does not feel its interest called upon to occupy himself with it. We speak our language before we know its

grammar, and we reason just as well whether we have learnt the science of logic or not.

This science of Logic, or, as it is sometimes called, of Formal Logic, was, until modern times, regarded as a quite simple account of the principles that govern the exercise of our reasoning faculty, and of the rules founded on those principles by following which truth was attained and false opinion or error avoided. It was called formal because it was supposed to have no relation to the matter of the subject reasoned about, but only to the form which the reasoning must take. A complete account of this formal science, as it was recognised and accepted for many ages, might easily have been set forth within the limits of a small volume such as this. But the development of modern philosophy has wrought an extraordinary change. Anyone now who will set himself the task of mastering all the problems that have been raised round the question of the nature of logical process, will find himself confronted with a vast library of special treatises, and involved in discussions that embrace the whole of philosophy. The special problem of truth that it is the object of this little volume to explain is a quite modern question. It has been raised within the present generation of philosophical writers, and is to-day, perhaps, the chief controversy in which philosophers are engaged. But although it is only in the last few years that controversy has been aroused on this question, the problem is not new-it is indeed as old as philosophy itself. In the fifth century before Christ, and in the generation that immediately preceded Socrates, a famous philosopher, Protagoras (481-411 B.C.) published a book with the title The Truth. He had the misfortune. common at that time, to offend the religious Athenians,

for he spoke slightingly of the gods, proposing to " banish their existence or non-existence from writing and speech." He was convicted of atheism, and his books were publicly burnt, and he himself, then seventy years of age, was either banished or at least was obliged to flee from Athens, and on his way to Sicily he lost his life in a shipwreck. Our knowledge of this book of Protagoras is due to the preservation of its argument by Plato in the dialogue "Theætetus." Protagoras, we are there told, taught that "man is the measure of all things-of the existence of things that are, and of the non-existence of things that are not." "You have read him ?" asks Socrates, addressing Theætetus. " Oh yes, again and again," is Theætetus' reply. Plato was entirely opposed to the doctrine that Protagoras taught. It seemed to him to bring gods and men and tadpoles to one level as far as truth was concerned; for he drew the deduction that if man is the measure of all things. then to each man his own opinion is right. Plato opposed to it the theory that truth is the vision of a pure objective reality.

This same problem that exercised the ancient world is now again a chief centre of philosophical interest, and the aim of this little book is not to decide that question, but to serve as a guide and introduction to those who desire to know what the question is that divides philosophers to-day into the hostile camps of pragmatism and intellectualism.

The subject is not likely to interest anyone who does not care for the study of the exact definitions and abstract principles that lie at the basis of science and philosophy. There are many who are engaged in the study of the physical and natural sciences, and also many who devote themselves to the social and political sciences, who hold in profound contempt the fine distinctions and intellectual subtleties that seem to them the whole content of logic and metaphysic. The attitude of the scientific mind is not difficult to understand. It has recently been rather graphically expressed by a distinguished and popular exponent of the principles of natural science. "One may regard the utmost possibilities of the results of human knowledge as the contents of a bracket, and place outside the bracket the factor x to represent those unknown and unknowable possibilities which the imagination of man is never wearied of suggesting. This factor x is the plaything of the metaphysician." 1 This mathematical symbol of the bracket, multiplied by x to represent the unknown and unknowable possibilities beyond it, will serve me to indicate with some exactness the problem with which I am going to deal. The symbol is an expression of the agnostic position. The popular caricature of the metaphysician and his "plaything" we may disregard as a pure fiction. The unknowable x of the agnostic is not the "meta" or "beyond" of physics which the metaphysician vainly seeks to know. The only "beyond" of physics is consciousness or experience itself, and this is the subject-matter of metaphysics. Our present problem is that of the bracket, not that of the factor outside, if there is any such factor, nor yet the particular nature of the contents within. There are, as we shall see, three views that are possible of the nature of the bracket. In one view, it is merely the conception of the extent which knowledge has attained or can attain; it has no intimate relation to the knowledge, but marks externally its limit. This is the view of the realist. In another view, the whole of knowledge is intimately related <sup>1</sup> Sir Ray Lankester.

## PHYSICS AND METAPHYSICS

to its particular parts; the things we know are not a mere collection or aggregate of independent facts that we have discovered; the bracket which contains our knowledge gives form to it, and relates organically the dependent parts to the whole in one comprehensive individual system. This is the view of the idealist. There is yet another view: human knowledge is relative to human activity and its needs; the bracket is the ever-changing limit of that activity—within it is all that is relevant to human purpose and personality, without it is all that is irrelevant. This is the view of the pragmatist.

It is not only the scientific mind, but also the ethical and religious mind, that is likely to be at least impatient, if not contemptuous, of this inquiry. The question, What is truth ? will probably bring to everyone's mind the words uttered by a Roman Procurator at the supreme moment of a great world-tragedy. Pilate's question is usually interpreted as the cynical jest of a judge indifferent to the significance of the great cause he was trying —the expression of the belief that there is no revelation of spiritual truth of the highest importance for our human nature, or at least that there is no infallible test by which it can be known. It is not this problem of truth that we are now to discuss.

There are, on the other hand, many minds that can never rest satisfied while they have accepted only, and not examined, the assumptions of science and the values of social and political and religious ideals. Their quest of first principles may appear to more practical natures a harmless amusement or a useless waste of intellectual energy; but they are responding to a deep need of our human nature, a need that, it may be, is in its very nature insatiable—the need of intellectual satisfaction. It is

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the nature of this intellectual satisfaction itself that is our problem of truth.

There are therefore two attitudes towards the problem of truth and reality-that of the mind which brings a practical test to every question, and that of the mind restless to gain by insight or by speculation a clue to the mystery that enshrouds the meaning of existence. The first attitude seems peculiarly to characterise the man of science, who delights to think that the problem of reality is simple and open to the meanest understanding. Between the plain man's view and that of the man of high attainment in scientific research there is for him only a difference of degree, and science seems almost to require an apology if it does not directly enlarge our command over nature. It would explain life and consciousness as the result of chemical combination of material elements. Philosophy, on the other hand, is the instinctive feeling that the secret of the universe is not open and revealed to the plain man guided by common-sense experience alone, even if to this experience be added the highest attainments of scientific research. Either there is far more in matter than is contained in the three-dimensional space it occupies, or else the universe must owe its development to something beyond matter. The universe must seem a poor thing indeed to a man who can think that physical science does or can lay bare its meaning. It is the intense desire to catch some glimpse of its meaning that leads the philosopher to strive to transcend the actual world by following the speculative bent of the reasoning power that his intellectual nature makes possible.

### APPEARANCE AND REALITY

#### CHAPTER II

#### APPEARANCE AND REALITY

OUR conscious life is one unceasing change. From the first awakening of consciousness to the actual present, no one moment has been the mere repetition of another, and the moments which as we look back seem to have made up our life are not separable elements of it but our own divisions of a change that has been continuous. And as it has been, so we know it will be until consciousness ceases with death. Consciousness and life arc in this respect one and the same, although when we speak of our consciousness we think chiefly of a passive receptivity, and when we speak of our life we think of an activity. Consciousness as the unity of knowing and / acting is a becoming. The past is not left behind, it is with us in the form of memory; the future is not a predetermined order which only a natural disability prevents us from knowing, it is yet uncreated; conscious life is the enduring present which grows with the past and makes the future.

This reality of consciousness is our continually changing experience. But there is also another reality with which it seems to be in necessary relation and also in complete contrast—this is the reality of the material or physical universe. The world of physical reality seems to be composed of a matter that cannot change in a space that is absolutely unchangeable. This physical world seems made up of solid things, formed out of matter. Change in physical science is only a rearrangement of matter or an alteration of position in space.

This physical reality is not, as psychical reality is,

known to us directly; it is an interpretation of our sense experience. Immediate experience has objects, generally called sense data. These objects are what we actually see in sensations of sight, what we actually hear in sensations of sound, and so on; and they lead us to suppose or infer physical objects—that is, objects that do not depend upon our experience for their existence, but whose existence is the cause of our having the experience. The process by which we infer the nature of the external world from our felt experience is logical. It includes perceiving, conceiving, thinking or reasoning. The object of the logical process, the aim or ideal to which it seeks to attain, is truth. Knowledge of reality is truth.

There are therefore two realities, the reality of our felt experience from which all thinking sets out, and the reality which in thinking we seek to know. The one reality is immediate; it is conscious experience itself. The other reality is that which we infer from the fact of experience, that by which we seek to explain our existence. The one we feel, the other we think. If the difference between immediate knowledge and mediate knowledge or inference lay in the feeling of certainty alone or in the nature of belief, the distinction would not be the difficult one that it is. The theories of idealism and realism show how widely philosophers are divided on the subject. We are quite as certain of some of the things that we can only infer as we are of the things of which we are immediately aware. We cannot doubt, for instance, that there are other persons besides ourselves, yet we can have no distinct knowledge of any consciousness but one-our own. Our knowledge that there are other minds is an inference from our observation of the behaviour of some of the things we

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directly experience, and from the experience of our own consciousness. And even those things which seem in direct relation to us—the things we see, or hear, or touch —are immediately present in only a very small, perhaps an infinitesimal, part of what we know and think of as their full reality; all but this small part is inferred. From a momentary sensation of sight, or sound, or touch we infer reality that far exceeds anything actually given to us by the sensation.

Thinking is questioning experience. When our attention is suddenly attracted by something-a flash of light, or a sound, or a twinge of pain-consciously or unconsciously we say to ourself, What is that? The thata simple felt experience-contains a meaning, brings a message, and we ask what? We distinguish the existence as an appearance, and we seek to know the reality. The quest of the reality which is made known to us by the appearance is the logical process of thought. The end or purpose of this logical process is to replace the immediate reality of the felt experience with a mediated reality-that is, a reality made known to us. Directly, therefore, that we begin to think, the immediately present existence becomes an appearance, and throughout the development of our thought it is taken to be something that requires explanation. We seek to discover the reality which will explain it.

It is in this distinction of appearance and reality that the problem of truth arises. It does not depend upon any particular theory of knowledge. The same fact is recognised by idealists and by realists. Idealism may deny that the knowledge of independent reality is possible; realism may insist that it is implied in the very fact of consciousness itself—whichever is right, the reality which thinking brings before the mind is quite

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unlike and of a different order to that which we immediately experience in feeling. And even if we know nothing of philosophy, if we are ignorant of all theories of knowledge and think of the nature of knowledge simply from the standpoint of the natural man, the fact is essentially the same—the true reality of things is something concealed from outward view, something to be found out by science or by practical wisdom. Our knowledge of this reality may be true, in this case only is it knowledge; or it may be false, in which case it is not knowledge but opinion or error.

The reality then, the knowledge of which is truth, is not the immediate reality of feeling but the inferred reality of thought. To have any intelligible meaning, the affirmation that knowledge is true supposes that there already exists a distinction between knowledge and the reality known, between the being and the knowing of that which is known. In immediate knowledge, in actual conscious felt experience there is no such distinction, and therefore to affirm truth or error of such knowledge is unmeaning. I cannot have a toothache without knowing that I have it. In the actual felt toothache knowing and being are not only inseparable-they are indistinguishable. If, however, I think of my toothache as part of an independent order of reality, my knowledge of it may be true or false. I am then thinking of it as the effect of an exposed nerve, or of an abscess or of an inflammation-as something. that is to say, that is conditioned independently of my consciousness and that will cease to exist when the conditions are altered. In the same way, when I behold a landscape, the blue expanse of sky and variegated colour of the land which I actually experience are not either true or false, they are immediate experience in

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which knowing is being and being is knowing. Truth and error only apply to the interpretation of that experience, to the independent reality that I infer from it. We can, then, distinguish two kinds of knowledge which we may call immediate and mediate, or, better still, acquaintance and description. Accordingly, when we say that something is, or when we say of anything that it is real, we may mean either of two things. We may mean that it is part of the changing existence that we actually feel and that we call consciousness or life, or we may mean that it is part of an independent order of things whose existence we think about in order to explain, not what our feeling is (there can be no explanation of this), but how it comes to exist. We know by description a vast number of things with which we never can be actually acquainted. Such, indeed, is the case with all the knowledge by which we rule our lives and conceive the reality which environs us. Yet we are absolutely dependent on the reality we know by acquaintance for all our knowledge of these things. Not only is immediate sense experience and the knowledge it gives us by acquaintance the only evidence we have of the greater and wider reality, but we are dependent on it for the terms wherewith to describe it, for the form in which to present it, for the matter with which to compose it. And this is the real ground of the study of philosophy, the justification of its standpoint. It is this fact-this ultimate undeniable factthat all reality of whatever kind and in whatever way known, whether by thought or by feeling, whether it is perceived or conceived, remembered or imagined, is in the end composed of sense experience : it is this fact from which all the problems of philosophy arise. It is this fact that our utilitarian men of science find themselves forced to recognise, however scornful they may be of metaphysical methods and results.

The special problem of the nature of truth is concerned, then, with the reality that we have distinguished as known by description, and conceived by us as independent in its existence of the consciousness by which we know it. What is the nature of the seal by which we stamp this knowledge true ?

#### CHAPTER III

#### THE LOGICAL THEORIES

WHOEVER cares to become acquainted with the difficulty of the problem of truth must not be impatient of dialectical subtleties. There is a well-known story in Boswell's Life of Dr. Johnson which relates how the Doctor refuted Berkeley's philosophy which affirmed the non-existence of matter. "I observed," says Boswell, "that though we are satisfied his doctrine is not true, it is impossible to refute it. I shall never forget the alacrity with which Johnson answered, striking his foot with mighty force against a large stone, till he rebounded from it-' I refute it thus.'" Dr. Johnson is the representative of robust common sense. It has very often turned out in metaphysical disputes that the commonsense answer is the one that has been justified in the end. Those who are impatient of metaphysics are, therefore, not without reasonable ground; and indeed the strong belief that the common-sense view will be justified in the end, however powerful the sceptical doubt that seems to contradict it, however startling the paradox that seems to be involved in it, is a possession of the human mind without which the ordinary

practical conduct of life would be impossible. When, then, we ask ourselves. What is truth ? the answer seems to be simple and obvious. Truth, we reply, is a property of certain of our ideas; it means their agreement, as falsity means their disagreement, with reality. If I say of anything that it is so, then, if it is so, what I say / is true; if it is not so, then what I say is false. This simple definition of truth is one that is universally accepted. No one really can deny it, for if he did he would have nothing to appeal to to justify his own theory or condemn another. The problem of truth is only raised when we ask, What does the agreement of an idea with reality mean? If the reader will ask himself that question, and carefully ponder it, he will see that there is some difficulty in the answer to the simple question, What is truth ? The answer that will probably first of all suggest itself is that the idea is a  $\geq$ copy of the reality. And at once many experiences will seem to confirm this view. Thus when we look at a landscape we know that the lines of light which radiate from every point of it pass through the lens of each of our eyes to be focussed on the retina, forming there a small picture which is the exact counterpart of the reality. If we look into another person's eye we may see there a picture of the whole field of his vision reflected from his lens. It is true that what we see is not what he sees, for that is on his retina, but the analogy of this with a photographic camera, where we see the picture on the ground glass, seems obvious and natural; and so we think of knowledge, so far as it depends on the sense of vision, as consisting in more or less vivid, more or less faded, copies of real things stored up by the memory. But a very little reflection will convince us that the truth of our ideas cannot consist in the fact

that they are copies of realities, for clearly they are not copies in any possible meaning of the term. Take, for example, this very illustration of seeing a landscape : what we see is not a picture or copy of the landscape. but the real landscape itself. We feel quite sure of this, and with regard to the other sensations, those that come to us by hearing, taste, smell, touch, it would seem highly absurd to suppose that the ideas these sensations produce in us are copies of real things. The pain of burning is not a copy of real fire, and the truth of the judgment. Fire burns, does not consist in the fact that the ideas denoted by the words "fire." "burns." faithfully copy certain real things which are not ideas. And the whole notion is seen to be absurd if we consider that, were it a fact that real things produce copies of themselves in our mind, we could never know it was soall that we should have any knowledge of would be the copies, and whether these were like or unlike the reality, or indeed whether there was any reality for them to be like would, in the nature of the case, be unknowable, and we could never ask the question.

If, then, our ideas are not copies of things, and if there are things as well as ideas about things, it is quite clear that the ideas must correspond to the things in some way that does not make them copies of the things. The most familiar instance of correspondence is the symbolism we use in mathematics. Are our ideas of this nature ? And is their truth their correspondence ? Is a perfectly true idea one in which there exists a point to point correspondence to the reality it represents ? At once there will occur to the mind a great number of England is not a copy of England such as, for example, a photograph might be if we were to imagine it taken

from the moon. The correctness or the truth of a map consists in the correspondence between the reality and the diagram, which is an arbitrary sign of it. Throughout the whole of our ordinary life we find that we make use of symbols and signs that are not themselves either parts of or copies of the things for which they stand. Language itself is of this nature, and there may be Written symbols of symbols of symbols of real things. language is the arbitrary visual sign of spoken language. and spoken language is the arbitrary sign, it may be, of an experienced thing or of an abstract idea. Is then this property of our ideas which we call truth the correspondence of ideas with their objects, and is falsity the absence of this correspondence ? It cannot be so. To imagine that ideas can correspond with realities is to forget that ideas simply are the knowledge of realities : it is to slip into the notion that we know two kinds of different things, first realities and secondly ideas, and that we can compare together these two sorts of things. But it is at once evident that if we could know realities without ideas, we should never need to have recourse to ideas. It is simply ridiculous to suppose that the relation between consciousness and reality which we call knowing is the discovery of a correspondence between mental ideas and real things. The two things, that are related together in knowledge are not the idea and its object, but the mind and its object. The idea of the object is the knowledge of the object. There may be correspondence between ideas, but not between ideas and independent things, for that supposes that the mind knows the ideas and also knows the things and observes the correspondence between them. And even if we suppose that ideas are an independent kind of entity distinguishable and separable from another kind

of entity that forms the real world, how could we know that the two corresponded, for the one would only be inferred from the other ?

There is, however, a form of the correspondence theory of truth that is presented in a way which avoids this difficulty. Truth, it is said, is concerned not with the nature of things themselves but with our judgments about them. Judgment is not concerned with the terms that enter into relation-these are immediately experienced and ultimate-but with the relations in which they stand to one another. Thus, when we say John is the father of James, the truth of our judgment does not consist in the adequacy of our ideas of John and James, nor in the correspondence of our ideas with the realities, but is concerned only with the relation that is affirmed to exist between them. This relation is declared to be independent of or at least external to the terms, and, so far as it is expressed in a judgment. truth consists in its actual correspondence with fact. So if I say John is the father of James, then, if John is the father of James, the judgment is true, the affirmation is a truth ; if he is not, it is false, the affirmation is a falsehood. This view has the merit of simplicity, and is sufficiently obvious almost to disarm criticism. There is, indeed, little difficulty in accepting it if we are able to take the view of the nature of the real universe which it assumes. The theory is best described as pluralistic realism. It is the view that the universe consists of or is composed of an aggregate of an infinite number of entities. Some of these have a place in the space and time series, and these exist. Some, on the other hand, are possibilities which have not and may never have any actual existence. Entities that have their place in the perceptual order of experience exist,

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or have existed, or will exist; but entities that are concepts, such as goodness, beauty, truth, or that are abstract symbols like numbers, geometrical figures, pure forms, do not exist, but are none the less just as real as the entities that do exist. These entities are the subject-matter of our judgments, and knowing is discovering the relations in which they stand to one another. The whole significance of this view lies in the doctrine that relations are external to the entities that are related-they do not enter into and form part of the nature of the entities. The difficulty of this view is just this externality of the relation. It seems difficult to conceive what nature is left in any entity deprived of all its relations. The relation of father and son in the judgment, John is the father of James, is so far part of the nature of the persons John and James, that if the judgment is false then to that extent John and James are not the actual persons John and James that they are thought to be. And this is the case even in so purely external a relation as is expressed, say, in the judgment, Edinburgh is East of Glasgow. It is difficult to discuss any relation which can be said to be entirely indifferent to the nature of its terms, and it is doubtful if anything whatever would be left of a term abstracted from all its relations.

These difficulties have led to the formulation of an altogether different theory, namely, the theory that truth does not consist in correspondence between ideas and their real counterparts, but in the consistence and internal harmony of the ideas themselves. It is named the coherence theory. It will be recognised at once that there is very much in common experience to support it. It is by the test of consistency and coherence that we invariably judge the truth of evidence. Also it seems a very essential part of our intellectual nature to reject as untrue and false any statement or any idea that is self-contradictory or irreconcilable with the world of living experience. But then, on the other hand, we by no means allow that that must be true which does not exhibit logical contradiction and inconsistency. It is a common enough experience that ideas prove false though they have exhibited no inherent failure to harmonise with surrounding circumstances nor any self-contradiction. The theory, therefore, requires more than a cursory examination.

Thinking is the activity of our mind which discovers the order, arrangement, and system in the reality that the senses reveal. Without thought, our felt experience would be a chaos and not a world. The philosopher Kant expressed this by saying that the understanding gives unity to the manifold of sense. The understanding, he said, makes nature. It does this by giving form to the matter which comes to it by the senses. The mind is not a tabula rasa upon which the external world makes and leaves impressions, it is a relating activity which arranges the matter it receives in forms. First of all there are space and time, which are forms in which we receive all perceptual experience, and then there are categories that are conceptual frames or moulds by which we think of everything we experience as having definite relations and belonging to a real order of existence. Substance, causality, quality, and quantity are categories; they are universal forms in which the mind arranges sense experience, and which constitute the laws of nature, the order of the world. Space and time, and the categories of the understanding Kant declared to be transcendental-that is to say, they are the elements necessary to experience which are not

themselves derived from experience, as, for example, that every event has a cause. There are, he declared, synthetic a priori judgments-that is, judgments about experience which are not themselves derived from experience, but, on the contrary, the conditions that make experience possible. It is from this doctrine of Kant that the whole of modern idealism takes its rise. Kant, indeed, held that there are things-in-themselves, and to this extent he was not himself an idealist, but he also held that things-in-themselves are unknowable. and this is essentially the idealist position. Clearly, if we hold the view that things-in-themselves are unknowable, truth cannot be a correspondence between our ideas and these things-in-themselves. Truth must be some quality of the ideas themselves, and this can only be their logical consistency. Consistency, because the ideas must be in agreement with one another; and logical, because this consistency belongs to the thinking, and logic is the science of thinking. Truth, in effect, is the ideal of logical consistency. We experience in thinking an activity striving to attain the knowledge of reality, and the belief, the feeling of satisfaction that we experience when our thinking seems to attain the knowledge of reality, is the harmony, the absence of contradiction, the coherence, of our ideas themselves. This is the coherence theory. Let us see what it implies as to the ultimate nature of truth and reality.

In both the theories we have now examined, truth is a logical character of ideas. In the correspondence theory there is indeed supposed a non-logical reality, but it is only in the ideas that there is the conformity or correspondence which constitutes their truth. In the coherence theory, reality is itself ideal, and the ultimate ground of everything is logical. This is the theory of truth that accords with the idealist view, and this view finds its most perfect expression in the theory of the Absolute. The Absolute is the idea of an object that realises perfect logical consistency. This object logic itself creates; if it be a necessary existence, then knowledge of it cannot be other than truth. This view, on account of the supreme position that it assigns to the intellect, and of the fundamental character with which it invests the logical categories, has been named by those who oppose it Intellectualism. It is important that it should be clearly understood, and the next chapter will be devoted to its exposition.

#### CHAPTER IV

#### THE ABSOLUTE

When we ask questions about reality, we assume in the very inquiry that reality is of a nature that experience reveals. Reality in its ultimate nature may be logical—that is to say, of the nature of reason, or it may

be non-logical-that is to say, of the nature of feeling or will; but in either case it must be a nature of which conscious experience can give us knowledge. If indeed we hold the view which philosophers have often endeavoured to formulate, that reality is unknowable, then there is no more to be said; for, whatever the picture or the blank for a picture by which the mind tries to present this unknowable reality, there can be no question in relation to it of the nature and meaning of truth. An unknowable reality, as we shall show later on, is to all intents and purposes non-existent reality. On the other hand, if thinking leads to the knowledge of reality that we call truth, it is because being and knowing are ultimately one, and this unity can only be in conscious experience. This is the axiom on which the idealist argument is based.

The theory of the Absolute is a logical argument of great dialectical force. It is not an exaggeration to say that it is the greatest dialectical triumph of modern philosophy. It is the most successful expression of idealism. That this is not an extravagant estimate is shown, I think, by the fact that, widespread and determined as is the opposition it has had to encounter, criticism has been directed not so much against its logic as against the basis of intellectualism on which it rests. The very boldness of its claim and brilliance of its triumph lead to the suspicion that the intellect cannot be the sole determining factor of the ultimate nature of reality.

It will be easier to understand the theory of the Absolute if we first of all notice, for the sake of afterwards comparing it, another argument very famous in the history of philosophy—the argument to prove the existence of God named after St. Anselm of Canterbury.

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It runs thus: We have in God the idea of a perfect being; the idea of a perfect being includes the existence of that being, for not to exist is to fall short of perfection ; therefore God exists. The theological form of this argument need raise no prejudice against it. It is of very great intrinsic importance, and if it is wrong it is not easy to point out wherein the fallacy lies. It may, of course, be denied that we have or can have the idea of a perfect being-that is to say, that we can present that idea to the mind with a positive content or meaning as distinct from a merely negative or limiting idea. But this is practically to admit the driving force of the argument, namely, that there may be an idea of whose content or meaning existence forms part. With regard to everything else the idea of existing is not existence. There is absolutely no difference between the idea of a hundred dollars and the idea of a hundred dollars existing, but there is the whole difference between thought and reality in the idea of the hundred dollars existing and the existence of the hundred dollars. Their actual existence in no way depends on the perfection or imperfection of my idea, nor in the inclusion of their existence in my idea. This is sufficiently obvious in every case in which we are dealing with perceptual reality, and in which we can, in the words of the philosopher Hume, produce the impression which gives rise to the idea. But there are some objects which by their very nature will not submit to this test. No man hath seen God at any time, not because God is an object existing under conditions and circumstances of place and time impossible for us to realise by reason of the limitations of our finite existence, but because God is an object in a different sense from that which has a place in the perceptual order, and therefore it is affirmed of God that the "I have an idela of god therefore I have

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idea involves existence. God is not an object of perception, either actual or possible; nor in the strict sense is God a concept—that is to say, a universal of which there may be particulars. He is in a special sense the object of reason. If we believe that there is a God, it is because our reason tells us that there must be. God, in philosophy, is the idea of necessary existence, and the argument runs: God must be, therefore is. If, then, we exclude from the idea of God every mythological and theological element—if we mean not Zeus nor Jehovah nor Brahma, but the first principle of existence —then we may find in the St. Anselm argument the very ground of theism.

I have explained this argument, which is of the class called ontological because it is concerned with the fundamental question of being, in order to give an instance of the kind of argument that has given us the theory of the Absolute. I will now try to set that theory before the reader, asking only that he will put himself into the position of a plain man with no special acquaintance with philosophy, but reflective and anxious to interpret the meaning of his ordinary experience.

We have already seen that thinking is the questioning of experience, and that the moment it begins it gives rise to a distinction between appearance and reality. It is the asking *what*? of every *that* of felt experience to which the mind attends. The world in which we find ourselves is extended all around us in space and full of things which affect us in various ways : some give us pleasure, others give us pain, and we ourselves are things that affect other things as well as being ourselves affected by them. When we think about the things in the world in order to discover *what* they really are, we very soon find that we are liable to illusion and error.

Things turn out on examination to be very different to what we first imagined them to be. Our ideas, by which we try to understand the reality of things are just so many attempts to correct and set right our illusions and errors. And so the question arises, how far are our ideas about things truths about reality ? It is very soon evident that there are some qualities of things that give rise to illusion and error much more readily than others. The spatial qualities of things, solidity, shape, size, seem to be real in a way that does not admit of doubt. We seem able to apply to these qualities a test that is definite and absolute. On the other hand, there seem to be effects of these things in us such as their colour, taste, odour, sound, coldness, or heat, qualities that are incessantly changing and a fruitful source of illusion and error. We therefore distinguish the spatial qualities as primary, and consider that they are the real things and different from their effects, which we call their secondary qualities. And this is, perhaps, our most ordinary test of reality. If, for example, we should think that something we see is an unreal phantom. or a ghost, or some kind of hallucination, and on going up to it find that it does actually occupy space, we correct our opinion and say the thing is real. But the spatial or primary qualities of a thing, although they may seem more permanent and more essential to the reality of the thing than the secondary qualities, are nevertheless only qualities. They are not the thing itself, but ways in which it affects us. It seems to us that these qualities must inhere in or belong to the thing, and so we try to form the idea of the real thing as a substance or substratum which has the qualities. This was a generally accepted notion until Berkeley (1685–1753) showed how contradictory it is. So

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simple and convincing was his criticism of the notion, that never since has material substance been put forward as an explanation of the reality of the things we perceive. All that he did was to show how impossible and contradictory it is to think that the reality of that which we perceive is something in its nature imperceptible, for such must material substance be apart from its sense qualities. How can that which we perceive be something imperceptible ? And if we reflect on it, we shall surely agree that it is so—by the thing we mean its qualities, and apart from the qualities there is no thing. We must try, then, in some other way to reach the reality.

What, we shall now ask, can it be that binds together these sense qualities so that we speak of them as a thing? There are two elements that seem to enter into everything whatever that comes into our experience, and which it seems to us would remain if everything in the universe were annihilated. These are space and time. Are they reality ? Here we are met with a new kind of difficulty. It was possible to dismiss material substance as a false idea, an idea of something whose existence is impossible; but space and time are certainly not false ideas. The difficulty about them is that we cannot make our thought of them consistent-they are ideas that contain a self-contradiction, or at least that lead to a self-contradiction when we affirm them of reality. With the ideas of space and time are closely linked the ideas of change, of movement, of causation, of quality and quantity, and all of these exhibit this same puzzling characteristic, that they seem to make us affirm what we deny and deny what we affirm. I might fill this little book with illustrations of the paradoxes that are involved in these ordinary working ideas. Everyone is familiar with the difficulty involved in the

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idea of time. We must think there was a beginning, and we cannot think that there was any moment to which there was no before. So also with space, it is an infinite extension which we can only think of as a beyond to every limit. This receding limit of the infinitely extensible space involves the character of infinite divisibility, for if there are an infinite number of points from which straight lines can be drawn without intersecting one another to any fixed point there is therefore no smallest space that cannot be further divided. The contradictions that follow from these demonstrable contents of the idea of space are endless. The relation of time to space is another source of contradictory ideas. I shall perhaps, however, best make the meaning of this self-contradictory character of our ordinary ideas clear by following out a definite illustration. What is known as the antinomy of motion is probably familiar to everyone from the well-known paradox of the Greek philosopher Zeno. The flying arrow, he said, does not move, because if it did it would be in two places at one and the same time, and that is impossible. I will now put this same paradox of movement in a form which, so far as I know, it has not been presented before. My illustration will involve the idea of causation as well as that of movement. If we suppose a space to be fully occupied, we shall agree that nothing within that space can move without thereby displacing whatever occupies the position into which it moves. That is to say, the movement of any occupant of one position must cause the displacement of the occupant of the new position into which he moves. But on the other hand it is equally clear that the displacement of the occupant of the new position is a prior condition of the possibility of the movement of

the mover, for nothing can move unless there is an unoccupied place for it to move into, and there is no unoccupied place unless it has been vacated by its occupant before the movement begins. We have therefore the clear contradiction that a thing can only move when something else which it causes to move has already moved. Now if we reflect on it we shall see that this is exactly the position we occupy in our three-dimensional space. The space which surrounds us is occupied, and therefore we cannot move until a way is made clear for us, and nothing makes way for us unless we move. We cannot move through stone walls because we cannot displace solid matter, but we can move through air and water because we are able to displace these. The problem is the same. My movement displaces the air, but there is no movement until the air is displaced. Can we escape the contradiction by supposing the displacement is the cause and the movement the effect. Are we, like people in a theatre queue, only able to move from behind forward as the place is vacated for us in front ? In that case we should be driven to the incredible supposition that the original cause or condition of our movement is the previous movement of something at the outskirts of our occupied space, that this somewhat moving into the void made possible the movement of the occupant of the space next adjoining, and so on until after a lapse of time which may be ages. which may indeed be infinite, the possibility of movement is opened to us. In fact we must believe that the effect of our movement-namely, the displacement of the previous occupants from the positions we occupy in moving-happened before it was caused. Now it is impossible for us to believe either of the only two alternatives-either that we do not really move but only

appear to do so, or that the displacement our movement causes really precedes the movement. When we meet with a direct self-contradiction in our thoughts about anything, we can only suppose that that about which we are thinking is in its nature nonsensical, or else that our ideas about it are wrong.

It may perhaps be thought that the whole difficulty arises simply because what we are trying to think consistently about is a reality that is external to us. Space and time, movement, cause and effect are ideas that apply to a world outside and independent of the mind that tries to think it. May not this be the reason of our failure and the whole explanation of the seeming contradiction ? If we turn our thoughts inward upon our own being and think of the self, the I, the real subject of experience, then surely where thought is at home and its object is mental not physical, we shall know reality. It is not so. The same self-contradiction characterises our ideas when we try to present the real object of inner perception as when we try to present the real object of external perception. Not, of course, that it is possible to doubt the reality of our own existence, but that we fail altogether to express the meaning of the self we so surely know to exist in any idea which does not fall into self-contradiction. As in the case of the thing and its qualities, we think that there is something distinct from the qualities in which they inhere and yet find ourselves unable to present to the mind any consistent idea of such thing, so we think that there must be some substance or basis of personal identity, some real self which has the successive changing conscious states, which has the character which distinguishes our actions as personal but which nevertheless is not itself these things. The self-contradiction

in the idea of self, or I, or subject, is that it both cannot change and is always changing. As unchanging, we distinguish it from our body, which is an external object among other objects and is different from other objects only in the more direct and intimate relation in which it stands to us. The body is always changing; never for two successive moments is it exactly the same combination of chemical elements. We distinguish also ourself from that consciousness which is memory, the awareness of past experience, from present feelings, desires, thoughts, and strivings—these, we say, belong to the self but are not it. The self must have qualities and dwell in the body, guiding, directing, and controlling it, yet this self we never perceive, nor can we conceive it, for our idea of it is of a reality that changes and is yet unchangeable.

There is, however, one idea-an idea to which we have already alluded-that seems to offer us an escape from the whole of this logical difficulty, the idea that reality is unknowable. May not the contradictoriness of our ideas be due to this fact, that our knowledge is entirely of phenomena, of appearances of things, and not of things as they are in themselves ? By a thingin-itself we do not mean a reality that dwells apart in a universe of its own, out of any relation whatever to our universe. There may or may not be such realities, and whether there are or not is purely irrelevant to any question of the nature of reality in our universe. The thing-in-itself is the unknowable reality of the thing we know. We conceive it as existing in complete abstraction from every aspect or relation of it that constitutes knowledge of it in another. The self-contradiction of such an idea is not difficult to show, quite apart from any consideration of its utter futility as an

explanation. The thing-in-itself either is or elso it is not the reality of phenomena. If it is, then, inasmuch as the phenomena reveal it, it is neither in-itself nor unknowable. If, on the other hand, it is not, if it is unrelated in any way to phenomena, then it is not only unknowable—it does not exist to be known. It is an idea without any content or meaning, and therefore indistinguishable from nothing. It is simply saying of one and the same thing that it must be and that there is nothing that it can be.

While, then, there is no actual thing that we experience, whether it be an object outside of us or an object within us, of which we can say this is not a phenomenon or appearance of reality but the actual reality itself, we cannot also say that we do not know reality, because if we had no idea, no criterion, of reality we could never know that anything was only an appearance. It is this fact-the fact that we undoubtedly possess, in the very process of thinking itself, a criterion of realitythat the idealist argument lays hold of as the basis of its doctrine. The mere fact seems, at first sight, barren and unpromising enough, but the idealist does not find it so. Possessed of this principle, logic, which has seemed till now purely destructive, becomes in his hands creative, and gives form and meaning to an object of pure reason.

The criterion of reality is self-consistency. We cannot think that anything is ultimately real which has its ground of existence in something else. A real thing is that which can be explained without reference to some other thing. Reality, therefore, is completely selfcontained existence, not merely dependent existence. Contradictions cannot be true. If we have to affirm a contradiction of anything, it must be due to an appear-

ance, and the reality must reconcile the contradiction. The idea of reality, therefore, is the idea of perfect harmony. Knowing, then, what reality is, can we say that there is any actual object of thought that conforms to it ? And have we in our limited experience anything that will guide us to the attainment of this object ? The idealist is confident that we have. Some things seem to us to possess a far higher degree of reality than others, just because they conform in a greater degree to this ideal of harmonious existence. It is when we compare the reality of physical things with the reality of mental things that the contrast is most striking, and in it we have the clue to the nature of the higher reality. Physical reality may seem, and indeed in a certain sense is, the basis of existence, but when we try to think out the meaning of physical reality, it becomes increasingly abstract, and we seem unable to set any actual limit to prevent it dissipating into nothing. In physical science we never have before us an actual element, either matter or energy, in which we can recognise, however far below the limit of perceivability, the ultimate stuff of which the universe is composed. Science has simply to arrest the dissipation by boldly assuming a matter that is the substance and foundation of reality and an energy that is the ultimate cause of the evolution of the universe. On the other hand, when we consider mental existence, the pursuit of reality is in an exactly contrary direction. There, the more concrete, the more comprehensive, the more individual a thing is, the greater degree of reality it seems to have. In the spiritual realm, by which we mean, not some supposed supra-mundane sphere, but the world of values, the world in which ideas have reality, in which we live our rational life, reality is always sought in a

higher and higher individuality. The principle of individuality is that the whole is more real than the parts. An individual human being, for example, is a whole, an indivisible organic unity, not merely an aggregation of physiological organs with special functions, nor are these a mere collection of special cells, nor these a mere concourse of chemical elements. The State as a community is an individual organic unity with a reality that is more than the mere total of the reality of individual citizens who compose it. It is this principle of individuality that is the true criterion of reality. It is this principle that, while it leads us to seek the unity in an individuality ever higher and more complete than we have attained, at the same time explains the discrepancy of our partial view, explains contradictions as the necessary result of the effort to understand the parts in independence of the whole which gives to them their reality. Thus, while on the one hand the scientific search for reality is ever towards greater simplicity and abstractness, a simplicity whose ideal limit is zero, the philosophical search for reality is ever towards greater concreteness, towards full comprehensiveness, and its ideal limit is the whole universe as one perfect and completely harmonious individual. This idea of full reality is the Absolute. There are not two realities, one material and the other spiritual; the material and the spiritual are two directions in which we may seek the one reality, but there is only one pathway by which we shall find it.

The Absolute is the whole universe not in its aspect of an aggregate of infinitely diverse separate elements, whether these are material or spiritual, but in its aspect of an individual whole and in its nature as a whole. This nature of the whole is to be individual—only in

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the individual are contradictions reconciled. Is the Absolute more than an idea ? Does it actually exist ? Clearly we cannot claim to know it by direct experience, by acquaintance; it is not a *that* of which we can ask what? It is the object of reason itself, therefore we know that it must be. Also we know that it can be; it is a possible object in the logical meaning that it is not a self-contradictory idea, like every other idea that we can have. It is not self-contradictory, for it is itself the idea of that which is consistent. Therefore, argues the idealist, it is, for that which must be, and can be, surely exists. The reader will now understand why I introduced this account of the Absolute with a description for comparison of the St. Anselm proof of the existence of God.

There is one further question. Whether the Absolute does or does not exist, is it, either in idea or reality, of any use to us? The reply is that its value lies in this, that it reveals to us the nature of reality and the meaning of truth. Logic is the creative power of thought which leads us to the discovery of higher and higher degrees of reality. The Satyr, in the fable, drove his guest from his shelter because the man blew into his hands to warm them, and into his porridge to cool it. The Satyr could not reconcile the contradiction that one could with the same breath blow hot and cold. Nor would he reconcile it ever, so long as he sought truth as correspondence. Truth would have shown the facts coherent by reconciling the contradiction in a higher reality.

#### THE PROBLEM OF TRUTH

#### CHAPTER V

#### PRAGMATISM

THE theory of the Absolute is only one form of Idealism, but it illustrates the nature and general direction of the development of philosophy along the line of speculation that began with Kant. There have been, of course, other directions. In particular many attempts have been made to make philosophy an adjunct of physical science, but the theory I have sketched is characteristic of the prevailing movement in philosophy during the last period of the Nineteenth Century, and until the movement known as Pragmatism directed criticism upon it. The form the pragmatical criticism of the theory of the Absolute took was to direct attention to the logical or intellectual principle on which it rests-in fact to raise the problem of the nature of truth. Pragmatism is a theory of the meaning of truth. It is the denial of a purely logical criterion of truth, and the insistence that truth is always dependent on psychological conditions. Pragmatism therefore rejects both the views that we have examined-the theory that truth is a correspondence of the idea with its object, and the theory that it is the logical coherence and consistency of the idea itself. It proposes instead the theory that truth is always founded on a practical postulate, and consists in the verification of that postulate ; the verification not being the discovery of something that was waiting to be discovered, but the discovery that the postulate that claims to be true is useful, in that it works. Truth is what works.

The Absolute is reality and truth. The idealist argument which we have followed was an attempt to

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determine the nature of reality, and not an attempt to explain what we mean when we say that an idea agrees with its object. What is true about reality ? was the starting point, and not, What is truth? nor even, What is true about truth? The search for reality failed to discover any object that agreed with its idea, but at last there was found an idea that must agree with its object, an idea whose object cannot not be. This idea, the Absolute, reveals the nature of reality. The pragmatist when he asks. What is truth ? seems to dig beneath the argument, seems indeed even to reach the bedrock, but it is only in appearance that this is so. How, indeed, could he hope to be able to answer the question he has himself asked, if there is no way of distinguishing the true answer from the false? We must already know what truth is even to be able to ask what it is-a point which many pragmatist writers appear to me to have overlooked.

In challenging the idea of truth, the pragmatist raises the no less important question of the nature of error. A theory of truth must not only show in what truth consists, but must distinguish false from true and show the nature of error. The pragmatist claims for his theory that it alone can give a consistent account of illusion and error. Now, as we saw in our account of the idealist argument, it is the fact of illusion and error that compels us to seek reality behind the appearances that are the sense data of our conscious experience. The whole force of the pragmatist movement in philosophy is directed to proving that truth is a prior consideration to reality. If we understand the nature of truth, we shall see reality in the making. Reality can in fact be left to look after itself; our business is with our conceptions alone, which are either true or false. The distinction of appearance and reality does

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not explain illusion and error because it does not distinguish between true and false appearance. There is no principle in idealism by which the Absolute rejects the false appearance and reconciles the true.

Before I examine the pragmatist argument, I ought first to explain the meaning and origin of the word. The term pragmatism, that has in the last few years entered so widely into all philosophical discussion, was used first by Mr. C. S. Peirce, an American philosopher, in a magazine article written as long ago as 1878, but it attracted no attention for nearly twenty years, when it was recalled by William James in the criticism of the current philosophy in his Will to Believe, a book which marks the beginning of the new movement. Pragmatism was first put forward as the principle that the whole meaning of any conception expresses itself in practical consequences. The conception of the practical effects of a conception is the whole conception of the object. The pragmatist maxim is-would you know what any idea or conception means, then consider what practical consequences are involved by its acceptance or rejection. Dr. Schiller, the leading exponent of the principle in England, prefers to call the philosophy "Humanism" in order still more to emphasize the psychological and personal character of knowledge. The name is suggested by the maxim of Protagoras, "Man is the measure of all things." The term Intellectualism is used by pragmatist writers to include all theories of knowledge that do not agree with their own, very much as the Greeks called all who were not Greeks, Barbarians. It must not be taken to mean, as its etymology would imply, a philosophy like that of Plato, which held that only universals, the ideas, are real, or like that of Hegel, who said that "the actual is the rational and the rational is the actual." The

pragmatists apply the term intellectualist to all philosophers who recognise an objective character in the logical ideal of truth, whether or not they also recognise non-logical elements in reality, and whether or not these non-logical elements are physical, such as matter and energy, or purely psychical, such as will, desire, emotion, pleasure, and pain.

Pragmatism is a criticism and a theory. If reality in its full meaning is the Absolute, and if all seeming reality is only a degree of or approximation to this full reality, if the knowledge of this reality only is truth, must it not seem to us that truth is useless knowledge? Useless, not in the sense that it is without value to the mind that cares to contemplate it, but useless in so far as the hard everyday working world in which we have to spend our lives is concerned. We who have to win our existence in the struggle of life, need truth. We need truth in order to act. Truth that transcends our temporal needs, truth that is eternal, truth that reconciles illusion and error, that accepts them as a necessary, condition of appearance in time, is useless in practice, however it may inspire the poet and philosopher. Truth to serve us must reject error and not reconcile it, must be a working criterion and not only a rational one. Whatever truth is, it is not useless ; it is a necessity of life, not a luxury of speculation. Pragmatism therefore rejects the logical criterion of truth because it is purely formal and therefore useless. It demands for us a practical criterion, one that will serve our continual needs. Whether our working ideas-cause, time, space, movement, things and their qualities, terms and their relations, and the like-are consistent or inconsistent in themselves, they more or less work; and in so far as they work they are useful and serve us, and because they work, and just in so far as they work, they are true, The pragmatist therefore declares that utility, not logical consistency, is the criterion of truth. Ideas are true in so far as they work. The discovery that they serve us is their verification. If we discover ideas that will serve us better, the old ideas that were true become untrue, and the new ideas that we adopt become true because they are found to work.

This doctrine of the verification or making true of ideas leads to a theory of the origin of the ideas themselves. Each idea has arisen or been called forth by a human need. It has been formed by human nature to meet a need of human nature. It is a practical postulate claiming truth. Even the axioms that now seem to us self-evident-such, for example, as the very law of contradiction itself, from which, as we have seen, the logical criterion of consistency is deduced-were in their origin practical postulates, called forth by a need, and, because found to work, true. The inconsistencies and contradictions in our ideas do not condemn them as appearance, and compel us to construct a reality in which they disappear or are reconciled, but are evidence of their origin in practical need and of their provisional character. Truth is not eternal, it is changing. New conditions are ever calling forth new ideas, and truths become untrue. Each new idea comes forward with a claim to truth, and its claim is tested by its practicability. Truth is not something we discover, and which was there to be discovered. We verify ideas. To verify is not to find true but to make true.

The pragmatist theory therefore is that truth is made. In all other theories truth is found. But if we make truth we must make reality, for it is clear that if reality is there already, the agreement with it of man-made truth would be nothing short of a miracle. The pragmatist, or at all events the pragmatist who is also a

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humanist, finds no difficulty in accepting this consequence of the theory, although at the same time insisting that the whole problem of being as well as of knowing is concerned with truth. We shall see, however that it offers a serious difficulty to the acceptance of the theory—a theory which in very many respects agrees with ordinary practice and with scientific method. Take for example scientific method. Is not all progress in science made by suggesting a hypothesis, and testing it by experiment to see if it works? Do we not judge its claim to truth by the practical consequences involved in accepting or rejecting it ? Is there any other verification? This is the simple pragmatist test, -does the laboratory worker add to it or find it in any respect insufficient ? If truth can be considered alone, then we must admit that it is the attribute of knowledge which is comprised under the term useful, the term being used in its most comprehensive meaning to include every kind of practical consequence. It is the question of reality that raises the difficulty for the scientific worker. We cannot believe, or perhaps we should say. the ordinary man and the scientific man would find it very difficult to believe, that reality changes correspondingly with our success or failure in the verification of our hypothesis. When the scientific worker verifies his hypothesis, he feels not that he has made something true which before was not true, but that he has discovered what always was true, although until the discovery he did not know it. To this the pragmatist reply is, that this very belief is a practical consequence involved in the verification of the hypothesis, involved in the discovery that it works. What he denies is that truth reveals, or ever can reveal, a reality entirely irrele-vant to any human purpose. It is also very important to add that in declaring that truth is verification, the

pragmatist does not set up a purely practical or utilitarian standard. The "working" of truth means theoretical as well as practical working. Much of the current criticism of pragmatism has failed to take notice of this intention or meaning of its principle, and hence the common misapprehension that the maxim "truth is what works" must mean that whatever a man believes is for him truth.

The pragmatist doctrine and attitude will perhaps be easier to understand if we take it in regard to a particular instance of truth and error in regard to fundamental notions. In the last four or five years a new principle has been formulated in Physics, named the Principle of Relativity. It revolutionises the current conceptions of space and time. It is so recent that probably some of my readers now hear of it for the first time, and therefore before I refer to its formulation by mathematicians I will give a simple illustration to explain what it is. Suppose that you are walking up and down the deck of a steamer, and let us suppose that the steamer is proceeding at the speed of four miles an hour, the space that you cover and the interval of time that you occupy are exactly the same for you whether you are moving up the deck in the direction the steamer is going or down the deck in the direction which is the reverse of the steamer's movement. But suppose some one on the shore could observe you moving while the ship was invisible to him, your movement would appear to him entirely different to what it is to you. When you were walking up the deck you would seem to be going at twice the speed you would be going, and when you were going down the deck you would seem not to be moving at all. The time measurement would also seem different to the observer on the shore, for while to you each moment would be measured by an equal

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space covered, to him one moment you would be moving rapidly, the next at rest. This is simple and easy to understand. Now suppose that both you and the observer were each observing a natural phenomenon, say a thunder-storm, it would seem that each of you ought to observe it with a difference-a difference strictly calculable from the system of movement, the ship, in which you were placed in relation to him. The propagation of the sound and of the light would have to undergo a correction if each of you described your experience to the other. If you were moving in the direction of the light waves they would be slower for you than for him, and if against their direction they would be faster for you than for him. Of course the immense velocity of the light waves, about 200,000 miles a second, would make the difference in a movement of four miles an hour so infinitesimal as to be altogether inappreciable, but it would not be nothing, and you would feel quite confident that if it could be measured the infinitesimal quantity would appear in the result. Now suppose that we could measure it with absolute accuracy, and that the result was the discovery that the supposed difference did not exist at all-and of course, we suppose that there is no doubt whatever about the measurement-what, then, should we be obliged to think? We should be forced to believe that as the velocity of light was the same for the two observers, one moving, one at rest, therefore the space and the time must be different for each. Now, however strange it may seem, such a measurement has been made, and with this surprising result. In consequence there has been formulated a new principle in Physics named the Principle of Relativity. I take this Principle of Relativity for my illustration because it is based on reasoning that practically admits of no doubt, and because

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it requires us to form new conceptions of space and time which seem to alter fundamentally what we have hitherto considered as the evident and unmistakable nature of those realities. It has always seemed that the distance separating two points, and the interval of time separating two events, were each independent of the other and each absolute. However different the distance and the interval may appear to observers in movement or to observers in different systems of movement in relation to ourselves and to one another, in themselves they are the same distance and the same interval for all. They are the same for the man in the express train as for the man standing on the station platform. The Principle of Relativity requires us to think that this is not so, but that, contrary to all our settled notions, the actual space and time vary-really undergo an alteration, a contraction or expansion-with each different system of movement of translation to which the observer is bound. Events that for an observer belonging to one system of movement happen in the same place, for another observer in a different system of movement happen in different places. Events that for one observer happen simultaneously, for other observers are separated by a time interval according to the movement of translation of the system to which they belong. So that space, which Newton described as rigid, and time which he described as flowing at a constant rate, and which for him was absolute, are for the new theory relative, different for an observer in every different system of movement of translation. Or we may state it in the opposite way, and say that the Principle of Relativity shows us that the reason why natural phenomena, such as the rate of propagation of light, undergo no alteration when we pass from one system of movement of translation to another, as we are constantly doing in the changing velocity of the earth's movement round the sum, is that space and time alter with the velocity. I cannot here give the argument or describe the experiments which have given this result—I am simply taking it as an illustration.<sup>1</sup> It seems to me admirably suited to compare the pragmatist method and the pragmatist attitude with that of scientific realism and of absolute idealism.

Here, then, is a question in which the truth of our accepted notions is called in question, and new notions claim to be true. The sole question involved, prag- 4 matism insists, is the truth of conceptions, not the reality of things, and there is but one way of testing the truth of conceptions-and that is by comparing the rival conceptions in respect of the practical consequences that follow from them and adopting those that will work. If the old conceptions of space and time fail to conform to a new need, then what was true before the need was revealed is no longer true, the new conception has become true. By verifying the new conception, we make it true. But, objects the realist, an idea cannot become true; what is now true always was true, and what is no longer true never was true, though we may have worked with the false notion ignorant that it was false. Behind truth there is reality. The earth was spherical even when all mankind believed it flat and found the belief work. To this the pragmatist reply is that reality is only our objectification of truth; it possesses no meaning divorced from human purposes. Had anyone announced that the earth was a sphere

<sup>1</sup> The Principle of Relativity is mainly the result of the recent mathematical work of H. A. Lorentz, Einstein, and the late Professor Minkowski. A very interesting and not excessively difficult account of it is contained in *Dernières Pensées*, by the late Henri Poincaré; Paris, Alcan.

when it was generally held to be flat, unless his announcement had some relevance to a defect in the flat earth notion, or a claim to revise that notion, his announcement would have been neither a truth nor a falsehood in any intelligible meaning of the term-he would have been making an irrelevant remark. The notions of space and time that Newton held worked, and were therefore true; if a new need requires us to replace them with other notions, and these other notions will work and are therefore true, they have become true and Newton's notions have become false. If it is still objected that the new notions were also true for Newton, although he was ignorant of them, the need for them not having arisen, the only reply is that truth, or reality, in complete detachment from human purposes, cannot be either affirmed or denied.

With this view the idealist will be in agreement; his objection is of a different kind. He rejects, as the pragmatist does, the notion of a reality independent of human nature that forces upon us the changes that our conceptions undergo. These changes, he holds, are the inner working of the conceptions themselves, the manifestation of our intellectual nature, ever striving for an ideal of logical consistency. Truth is this ideal. We do not make it : we move towards it. If we compare, then, the idealist and the pragmatist doctrine, it will seem that, while for the idealist truth is growing with advancing knowledge into an ever larger because more comprehensive system of reality, for the pragmatist it is ever narrowing, discarding failures as useless and irrelevant to present purpose. How indeed, the idealist will ask, if practical consequences be the meaning of truth, is it possible to understand that knowledge has advanced or can advance ? Does not the history of science prove a continual expansion, an increasing

comprehension ? It is within the conception that the inconsistency is revealed, not in any mere outward use of the conceptions, and the intellectual effort is to reconcile the contradiction by relating the conception to a more comprehensive whole. How, then, does the idealist meet this case which we have specially instanced, the demand for new notions of space and time made by the Principle of Relativity ? He denies that the new conceptions are called forth by human needs in the narrow sense-that is to say, in the sense that working hypotheses or practical postulates are required. The need is purely logical. The inconsistency revealed in the notions that have hitherto served us can only be reconciled by apprehending a higher unity. If the older notions of space and time are inadequate to the more comprehensive view of the universe as a coordination of systems of movement, then this very negation of the older notions is the affirmation of the new, and from the negation by pure logic the content and meaning which are the truth of the new notions are derived. To this objection the pragmatist reply is that if this be the meaning of the truth there is no way shown by which it can be distinguished from error. There is in fact for idealism no error, no illusion, no falsehood; as real facts, there are only degrees of truth. But a theory of truth which ignores such stubborn realities as illusion, falsehood, and error is, from whatever standpoint we view it, useless. On the other hand, pragmatism offers a test by which we can discriminate between true and false-namely, the method of judging conceptions by their practical consequences. Can we or can we not make our conceptions work ? That is the whole meaning of asking, Are they true or false ? And now, lest the reader is alarmed at the prospect of having to revise his working ideas of space and

time, I will, to reassure him, quote the words with which Henri Poincaré concluded his account of the new conceptions, and which admirably express and illustrate the pragmatist's attitude: "What is to be our position in view of these new conceptions? Are we about to be forced to modify our conclusions? No, indeed: we had adopted a convention because it seemed to us convenient, and we declared that nothing could compel us to abandon it. To-day certain physicists wish to adopt a new convention. It is not because they are compelled to; they judge this new convention to be more convenient—that is all; and those who are not of this opinion can legitimately keep the old and so leave their old habits undisturbed. I think, between ourselves, that this is what they will do for a long time to come."

I have so far considered pragmatism rather as a criticism than as a doctrine. I will now try and characterise it on its positive side. It declares that there is no such thing as pure thought, but that all thinking is personal and purposive; that all knowing is directed, controlled, and qualified by psychological conditions such as interest, attention, desire, emotion, and the like ; and that we cannot, as formal logic does, abstract from any of these, for logic itself is part of a psychical process. Truth therefore depends upon belief; truths are matters of belief, and beliefs are rules of action. It is this doctrine that gives to pragmatism its paradoxical, some have even said its grotesque, character. It seems to say that the same proposition is both true and false-true for the man who believes it, false for the man who cannot. It seems to say that we can make anything true by believing it, and we can believe anything so long as the consequences of acting on it are not absolutely disastrous. And the proposition, All truths work, seems to involve the conclusion that all that works is true: and the proposition, The true is the useful, seems to imply that

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whatever is useful is therefore true. No small part of the pragmatist controversy has been directed to the attempt to show that all and each of these corollaries are, or arise from, misconceptions of the doctrine. I think, and I shall endeavour to show, that there is a serious defect in the pragmatist statement, and that these misconceptions are in a great part due to it. Nevertheless, we must accept the pragmatist disavowal. And there is no difficulty in doing so, for the meaning of the theory is sufficiently clear. Truth, according to pragmatism, is a value and not a fact. Truth is thus connected with the conception of "good." In saying that truth is useful, we say that it is a means to an end, a good. It is not a moral end, but a cognitive end, just as "beauty" is an æsthetic end. Truth, beauty, and goodness thus stand together as judgments of value or worth. It is only by recognising that truth is a value that we can possess an actual criterion to distinguish it from error, for if truth is a judgment of fact, if it asserts existence, so also does error.

The pragmatist principle has an important bearing on religion. It justifies the Faith attitude. It shows that the good aimed at by a "truth claim" is only attainable by the exercise of the will to believe. Thus it replaces the intellectual maxim, Believe in nothing you can possibly doubt, with the practical maxim, Resolve not to quench any impulse to believe because doubts of the truth are possible. Belief may even be a condition of the success of the truth claim.

#### CHAPTER VI

#### UTILITY

WE have seen in the last chapter that pragmatism is both a criticism and a theory. It shows us that the

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notion that truth is correspondence involves the conception of an "impossible" knowledge, and the notion that truth is coherence or consistency involves the con-ception of a "useless" knowledge. The explanation pragmatism itself offers is of the kind that is called in the technical language of philosophy teleological. This means that to explain or to give a meaning to truth all we can do is to point out the purpose on account of which it exists. This is not scientific explanation. Physical science explains a fact or an event by showing the conditions which give rise to it or that determine / its character. Pragmatism recognises no conditions determining truth such as those which science embodies in the conception of a natural law-that is, the idea of a connection of natural events with one another which is not dependent on human thoughts about them nor on human purposes in regard to them. Truth is in intimate association with human practical activity : its meaning lies wholly in its utility. We must therefore now examine somewhat closely this notion of utility.

There appears to me to be a serious defect in the pragmatist conception and application of the principle of utility; it is based on a conception altogether too narrow. A theory that condemns any purely logical process as resulting in "useless" knowledge can only justify itself by insisting on an application of the principle of utility that will be found to exclude not merely the Absolute of philosophy but most if not all of the results of pure mathematics and physics, for these sciences apply a method of pure logical deduction and induction indistinguishable from that which pragmatism condemns. The intellectual nature of man is an endowment which sharply distinguishes him from other forms of living creatures. So supreme a position does our intellect assign to us, so wide is the gap that separates

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us from other creatures little different from ourselves in respect of perfection of material organisation and adaptation to environment, that it seems almost natural to suppose that our intellect is that for which we exist. and not merely a mode of controlling, directing, and advancing our life. Now it is possible to hold-and this is the view that I shall endeavour in what follows to develop-that the intellect is subservient to life, and that we can show the manner and method of its working and the purpose it serves. So far we may agree with the pragmatist, but it is not the same thing to say that the intellect serves a useful purpose and to say that truth, the ideal of the intellect, the end which it strives for, is itself only a utility. Were there no meaning in truth except that it is what works, were there no meaning independent of and altogether distinct from the practical consequences of belief, of what value to us would the intellect be? If the meaning the intellect assigns to truth is itself not true, how can the intellect serve us ? The very essence of its service is reduced to nought: for what else but the conception of an objective truth, a logical reality independent of any and every psychological condition, is the utility that the intellect puts us in possession of ? It is this conception alone that constitutes it an effective mode of activity. Therefore, if we hold with the pragmatist that the intellect is subservient to life, truth is indeed a utility, but it is a utility just because it has a meaning distinct from usefulness. On the other hand, to condemn any knowledge as "useless" is to deny utility to the intellect.

Before I try to show that the logical method of the idealist philosophy, which pragmatism condemns because it leads to "useless" knowledge, is identical in every respect with the method employed in pure mathematics and physics, I will give for comparison two illustrations that seem to me instances of a narrow and of a wide use of the concept of utility.

A short time ago an orang-utang escaped from its cage in the Zoological Gardens under somewhat singular and very interesting circumstances. The cage was secured with meshed wire of great strength, judged sufficient to resist the direct impact of the most powerful of the carnivora; but the ape, by attention to the twisting of the plied wire, had by constant trying succeeded in loosening and finally in unwinding a large section. It escaped from its enclosure, and after doing considerable damage in the corridor, including the tearing out of a window frame, made its way into the grounds and took refuge in a tree, twisting the branches into a platform said to be similar to the constructions it makes in its native forests.

In taking this action as an illustration, I am not concerned with the question of what may be the distinction between action that is intelligent and action that is instinctive. If we take intelligence in a wide and general meaning, we may compare the intelligence shown by this ape with the intelligence shown by man in the highest processes of the mind. Psychologists would, I think, be unanimous in holding that in the mind of the ape there was no conception of freedom, no kind of mental image of unrestricted life and of a distinct means of attaining it, no clearly purposed end, the means of attaining which was what prompted the undoing of the wire, such as we should certainly suppose in the case of a man in a similar situation. It was the kind of intelligent action that psychologists denote by the description "trial and error." It seems to me, however, that this exactly fulfils the conditions that the pragmatist doctrine of the meaning of truth require. We see the intellect of the ape making true by finding out what works.

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We can suppose an entire absence of the idea of objective truth to which reality must conform, of truth unaffected by purpose. Here, then, we seem to have the pure type of truth in its simplest conditions, a practical activity using intelligence to discover what works. Is the difference between this practical activity and the higher mental activities as we employ them in the abstract sciences one of degree of complexity only, or is it different in kind ?

Let us consider now, as an illustration of the method of the abstract sciences, the well-known case of the discovery of the planet Neptune. This planet was discovered by calculation and deduction, and was only seen when its position had been so accurately determined that the astronomers who searched for it knew exactly the point of the heavens to which to direct their telescopes. The calculation was one of extraordinary intricacy, and was made independently by two mathematicians. Adams of Cambridge and Leverrier of Paris, between the years 1843 and 1846. Each communicated his result independently-Adams to the astronomer Challis, the Director of the Cambridge Observatory, and Leverrier to Dr. Galle of the Berlin Observatory. Within six weeks of one another and entirely unknown to one another, in August and September 1846, each of these astronomers observed the planet where he had been told to look for it. This is one of the romances of modern science. It is not the discovery but the method that led to it which may throw light on our problem of the nature of truth.

At first sight this seems exactly to accord with and even to illustrate the pragmatist theory, that truth is what works. The investigation is prompted by the discrepancies between the actual and the calculated positions of Uranus, the outermost planet, as it was then supposed, of the system. This revealed a need, and this The thought of Repoten 1020 on Trial

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need was met by the practical postulate of the existence of another planet as yet unseen. The hypothesis was found to work even before the actual observation put the final seal of actuality on the discovery. What else but the practical consequences of the truth claim in the form of the hypothesis of an undiscovered planet were ever in question ? Yes, we reply, but the actual method adopted, and the knowledge sought for by the method, are precisely of the kind that pragmatism rejects as "useless" knowledge. Why were not the observed movements of Uranus accepted as what they were ? Why was it felt that they must be other than they were seen to be unless there was another planet? The need lay in the idea of system. It was inconsistent with the system then believed complete, and the need was to find the complete system in which it would harmonise. The truth that was sought for was a harmonious individual whole, and the method employed precisely that which the Absolutist theory of reality employs. There is observed a discrepancy, an inconsistency, a contradiction within the whole conceived as a system. This negation is treated as a defect, is calculated and accurately determined, and is then positively affirmed of the reality. Now, what is distinctive in this method is that reality is conceived as a complete system. If the felt defect in this system cannot be made good by direct discovery, its place is supplied by a fiction, using the term in its etymological meaning to express something made and not in its derived meaning to express something found false. This intellectual process of construction is purely logical; no psychological element in the sense of the will to believe enters into it or colours it in any way

This is not an isolated instance, it illustrates the method of science in all theorising. An even more

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striking illustration than that we have just given is the case of the hypothesis of the luminiferous æther-a supposed existence, a fiction, that has served a useful, even an indispensable service in the history of modern physics. To many physicists, even to Lord Kelvin, the hypothesis seemed so surely established that its nonexistence hardly seemed thinkable, yet all the experiments designed to detect its presence have been uniformly negative in result, and it now seems not even necessary as a hypothesis, and likely to disappear. The æther was not only not discovered, it was not even suspected to exist, as in the case of the unknown planet Neptune-it was logically constructed. It was required to support the theory of the undulatory nature of light and to fulfil the possibility of light propagation in space. It was therefore a postulate, called forth by a needso far we may adopt the pragmatist account. But what was the nature of the need, and what was the method by which the postulate was called forth? It is in answering this question that the pragmatist criterion fails. The need was intellectual in the purely logical meaning of the term, and it was met by a purely logical construction. The need was a practical human need only in so far as the intellect working by logical process is a human endowment but not in any personal sense such as is conveyed by the term psychological. Willingness or unwillingness to believe, desire, aversion, interest were all irrelevant. Given the intellect, the logical necessity was the only need that called forth by logical process the "truth-claiming" hypothesis of the æther. But even so, the pragmatist will urge, is its truth anything else but its usefulness as shown in the practical consequences of believing it? Was it not true while it was useful, and is it not only now false, if it is false, if it is actually discovered not to be useful ?

The reply is that no mathematician or physicist would recognise the possibility of working with a conception of truth that simply identified truth with utility, and for this reason that he can only conceive reality as a system whose truth is symbolised in an equation. It is the system that determines and characterises the postulate, and not the postulate advanced at a venture, tried and verified, that constitutes the system. The mathematician begins by placing symbols to represent the unknown factors in his equation, and proceeds by means of his known factors to determine their value. The æther is at first a pure fiction constructed to supply an unknown existence recognised as a defect. Its truth cannot mean that it works for it cannot but work, having been constructed purely for that purpose. Its truth means that it corresponds to some actual existence at present unknown. To prove its truth the physicist does not appeal to its value as a hypothesis, but devises experiments by which, if it does exist, its existence will be demonstrated. In this actual case the experiments have had a uniformly negative result, and therefore the truth of the hypothesis is made doubtful or denied. The hypothesis continues to work as well as it ever did, and physicists will probably long continue to use it, but it has failed to establish its truth claim. The result is the modern Principle of Relativity, which, as we have already said, has produced a revolution in modern physics. The abolition of the æther would have been impossible if the physicist had been content with the utility of his hypothesis and had not experimented to prove its truth. The relation between truth and utility is thus proved to be that it is useful to know what is true.

These two illustrations of scientific method—namely, the discovery of Neptune and the negative discovery

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that the æther is non-existent—make it evident that verification is the intellectual process not of making true, but of finding true. We can, indeed, distinguish quite clearly the two processes. The first process, that of making true, is the constructing of the fiction by which we complete an incomplete system, and the second is the testing of that fiction to see if it corresponds to anything actually existing. No kind of intellectual activity will make an idea true, and conversely we may say that were truth only a utility, then knowledge instead of being systematic would be chaotic. Existence has its roots in reality, not in knowledge. Reality does not depend on truth. Truth is the intellectual apprehension of reality.

If the pragmatist objects that in this argument I have throughout supposed him to be urging the narrow meaning of utility, namely, that it is usefulness in the strictly practical sense, whereas he intends it in the widest possible meaning—a meaning that includes theoretical usefulness—then the trouble is a different one; it is to know how and where the pragmatist stops short of the coherence theory of truth, and wherein his method differs from that of the idealist.

This brings me to the consideration of another theory in which the concept of utility plays a large, indeed a predominant part. This is the theory of the relation of knowledge to life that is given to us in the philosophy of Bergson. I have in one of the volumes of this series given an account of this philosophy; I am here only dealing with its relation to this special problem of the nature of truth. It has been claimed that this philosophy is only a form of pragmatism, but it is not a theory of truth, and it has this essential difference from pragmatism that it is the intellect and not truth that is a utility. Before we consider the question that it gives rise to in regard to truth, let us first examine the theory of the intellect, and the nature of its utility. The intellect is a mode of activity, an endowment acquired in the course of evolution, and which has been retained and perfected because of its utility. This does not mean that the intellect directs us to what is useful and inhibits us from courses fatal to life, neither does it mean that it gives us any power to make true what is not already true, it means that the power to acquire knowledge is useful. There is a contrast in our own existence between our life and our intellect.

To understand the way in which the intellect serves the living creature endowed with it, we need only regard it from the standpoint of ordinary experience. We know in ourselves that our life is wider than our intellect, and that our intellect serves the activity of our life. The common expressions we employ, such as using our wits, taking an intelligent interest, trying to think, all imply a utility distinct from the intellect. So viewed, our life appears as an active principle within us, maintaining our organism in its relations, active and passive, and reactive to the reality outside and independent of it. Our intellect also seems both active and passive. It receives the influences that stream in upon us from the reality around us, it apprehends and interprets them, and works out the lines of our possible action in regard to them. The influences that flow in upon us from the outside world are already selected before our intellect apprehends them, for they flow in by the avenues of our senses, and the senses are natural instruments of selection. If we picture these influences as vibrations, then we may say that a certain group of vibrations of a very rapid frequency are selected by the eve and give rise to vision, that another group of very much lower frequency are selected by the ear and

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give the sensation of sound, and other groups are selected by taste, smell, and touch. Many groups are known indirectly by means of artificial instruments, and all the infinite series that unite these groups of the actually experienced vibrations escape our apprehension altogether-we have no means of selecting them. But all these sense data, as we may call them, come to us without exertion or activity on our part; it is the intellect which gives them meaning, which interprets them, which makes them the apprehension or awareness of objects or things. And the active part that the intellect plays is also a process of selection. This is evident if we reflect upon the universal form which our intellectual activity takes, namely, attention. It is in the act of attention that we are conscious of mental activity, and attention is essentially selection-the selection of an interest. Besides the natural selection that is effected by our senses and the conscious selection that is manifest in attention, there is also a more or less arbitrary selection that our intellect performs in marking out the lines of our practical interest and possible action. In this work of selection the intellect makes the world conform to the necessities of our action.

So far we have looked at our intellectual endowment from the standpoint of ordinary common-sense experience. Let us now consider the philosophical theory based on this view, which explains the nature of knowledge by showing its purpose. The intellect not only selects, but in selecting transforms the reality. It presents us with knowledge that indeed corresponds with reality, for it is essentially a view of reality, but also in selecting it marks out divisions, and gives to reality a form that is determined by practical interest. The same reality is different to different individuals and to different species according to their practical interests.

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The practical end which the human intellect serves is to present us with a field for our life activity. This is the real world for us, as we know it, real objects in a real space. Had we no other way of knowing but that of our intellect we should not know the life which is active within us as it is really lived, we should be as those who, standing outside, watch a movement, and not as those who are carried along in the movement and experience it from within. In life and intellect we have the counterpart of reality and appearance. Life is not something that changes ; it is the change of which the something is the appearance. Life is the reality of which all things, as we understand them, are the appearances, and on account of which they appear. The solid things in space and time are not in reality what they appear; they are views of the reality. The intellect guided by our practical interest presents reality under this form of solid spatial things. Clearly, then, if this view be true, the whole world, as it is presented to us and thought of by us, is an illusion. Our science is not unreal, but it is a transformed reality. The illusions may be useful, may, indeed, be necessary and indispensable, but nevertheless it is illusion.

But here there arises a new difficulty in regard to truth. If the usefulness of the intellect consists in the active production of an illusion, can we say that the intellect leads us to truth ? Is it not only if we can turn away from the intellect and obtain a non-intellectual intuition that we can know truth ?

# ILLUSION

### CHAPTER VII

#### ILLUSION

THE doctrine that the world that appears is essentially unlike the world that is is neither new nor peculiar to any particular theory of philosophy. It has received a new interest and a new interpretation lately in the theory that we are now considering, that the clue to the appearance of the world to us is to be found in the conception of the nature of the utility of the intellect and in the mode of its activity. The idea that we are perhaps disqualified by our very nature itself from beholding reality and knowing truth is illustrated in the wellknown allegory in the *Republic* of Plato:

"And now let me show in a figure how far our nature is enlightened or unenlightened. Behold ! human beings living in an underground den, which has a mouth open towards the light and reaching all along the den ; here they have been from their childhood, and have their legs and necks chained so that they cannot move and can only see before them, being prevented by the chains from turning round their heads. Above and behind them a fire is blazing at a distance, and between the fire and the prisoners there is a raised way; and you will see, if you look, a low wall built along the way, like the screen which marionette players have in front of them, over which they show the puppets. And men are passing along the wall carrying all sorts of vessels, and statues, and figures of animals made of wood and stone and various materials, which appear over the wall. . . .

"They are strange prisoners, like ourselves, and they see only their own shadows or the shadows of one another which the fire throws on the opposite wall of the cave. And so also of the objects carried and of the passers-by; to the prisoners the truth would be literally nothing but the shadows of the images.

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"And now look again, and see what will naturally follow if the prisoners are released and disabused of their error. At first, when any of them is liberated and compelled suddenly to stand up and turn his neck round and walk and look towards the light, he will suffer sharp pains; the glare will distress him, and he will be unable to see the realities of which in his former state he had seen the shadows. And then conceive someone saying to him that what he saw before was an illusion, but that now, when he is approaching nearer to being, and his eye is turned towards more real existence, he has a clearer vision, and what will be his reply? Will he not fancy that the shadows which he formerly saw are truer than the objects which are now shown to him ?...

"And suppose that he is forced into the presence of the sun himself, is he not likely to be pained and irritated ? When he approaches the light his eyes will be dazzled, and he will not be able to see anything at all of what are now called realities."

The thought that Plato has expressed in this wonderful allegory has entered deeply into all philosophy. What we first take for reality is merely a shadow world. But in Plato's view it is the intellect which gives us the means of escape, the power to turn from the illusion to behold the reality. It is not until now that philosophy has sought the clue to the illusion in the nature of the intellect itself. The very instrument of truth is unfitted to reveal to us the reality as it is, because its nature and purpose is to transform reality, to make reality appear in a form which, though of paramount importance to us as active beings, is essentially an illusion. The intellectual bent of our mind leads us away from, and not towards a vision of reality in its purity. The more our intellect progresses, and the more and more clearly we

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see into a greater and ever greater number of things, the farther are we from, and not the nearer to a grasp of reality as it is. To obtain this vision of reality we have to turn away from the intellect and find ourselves again in that wider life out of which the intellect is formed. Life, as it lives, is an intuition that is nonintellectual.

"Human intelligence," writes Bergson, "is not at all what Plato taught in the allegory of the cave. Its function is not to look at passing shadows, nor yet to turn itself round and contemplate the glaring sun. It has something else to do. Harnessed, like yoked oxen, to a heavy task, we feel the play of our muscles and joints, the weight of the plough, and the resistance of the soil. To act and to know that we are acting, to come into touch with reality and even to live it, but only in the measure in which it concerns the work that is being accomplished and the furrow that is being ploughed, such is the function of human intelligence."

The illusion to which our intellectual nature subjects us is the necessity we are under to regard the things of the universe as more ultimate, as more fundamental than the movement which actuates the universe. It seems to us impossible that there could exist movement or change, unless there already existed things to be moved or changed, things whose nature is not altered, but only their form and their external relations, when they are moved or changed. This necessity of thought seems to have received authoritative recognition in all attempts, religious and scientific, to conceive origins. Thus we read in the Book of Genesis :

"In the beginning God created the heaven and the earth. And the earth was without form, and void; and darkness was upon the face of the deep. And the Spirit of God moved upon the face of the waters." The matter of the universe, it is felt, must be in existence before the movement which vivifies it. The dead inert stuff must be created before it can receive the breath of life. And if God the creator is conceived as living before the matter which He has created, it is as an external principle, the relation of which to the creation is by most religious minds thought to transcend the power of the finite understanding to conceive.

The same fundamental conception of the primacy of matter over movement is evident in the scientific theories of the nature and origin of life. Life appears to science as a form of energy that requires things, matter occupying space, to support it. According to one view, life is the result of a certain combination or synthesis of chemical or physical elements, previously existing separately-a combination of very great complexity, and one that may possibly have occurred once only in the long process of nature, but which nevertheless might be, and some think probably, or even certainly, will be brought about by a chemist working in his laboratory. This is the mechanistic or materialist view. On the other hand, there is the theory of vitalism. Life, it is contended, cannot be due to such a synthesis of material elements as the mechanistic view supposes. because it is of the nature of an "entelechy"-that is, an individual existence which functions, as a whole, in every minutest part of the organism it "vitalises." Life has supervened upon, and not arisen out of the material organism which it guides and controls not by relating independent parts, but by making every part subserve the activity and unity of the whole. But the vitalist theory, as well as the mechanistic theory, conceives the movement and change which is life as dependent on the previous existence of a matter or stuff which is moved or changed. The philosophical conception differs, therefore, from both these theories. It is that life is an original movement, and that this movement is the whole reality of which things, inert matter, even spatial extension, are appearances. True duration is change, not the permanence of something amidst change. There are no unchanging things. Everything changes. Reality is the flux; things are views of the flux, arrests or contractions of the flowing that the intellect makes. The appearance of the world to us is our intellectual grasp of a reality that flows. This original movement is the life of the universe. Briefly stated, the argument on which the theory is, based is that it is logically impossible to explain change by changelessness, movement by immobility. Real change cannot be a succession of states themselves fixed and changeless; real movement cannot be the immobile positions in which some thing is successively at rest. On the other hand, if movement is original, the interruption of movement, in whatever way effected, will appear as things. The experience which confirms this argument is the insight that everyone may obtain of the reality of his own life as continuous movement, unceasing change, wherein all that exists exists together in a present activity. To develop this argument would exceed the limits of this book, and would be outside its purpose. It is essential, however, that such a theory should be understood, for clearly it is possible to hold not only that we are subject to illusion, but that illusion is of the very nature of intellectual appre-hension. If, then, the understanding works illusion for the sake of action, is it thereby disqualified as an instrument for the attainment of truth ?

We are brought, then, to the critical point of our inquiry. If illusion is the essential condition of human activity, if the intellect, the very instrument of truth, is itself affected, what is to save us from universal scepticism? If the salt have lost his savour, wherewith shall it be salted? The intellect with its frames and moulds shapes living change and movement into fixed immobile states; the process of knowing alters profoundly the reality known. Must we not conclude that knowledge, however useful, is not true? And to what shall we turn for truth? There is, indeed, if this be so, a deeper irony in the question, What is truth? than even Pilate could have imagined. We have absolutely no practical concern with truth—we must leave it to the mystic, to the unpractical, the contemplative man who has turned aside from the stern task of busy life.

It is not so. The problem that seems so fundamental admits a quite simple solution. Illusion is not error, nor is it falsehood; it is the appearance of reality. It is the reality that appears, and when we grasp the principle of utility we understand the shape that the appearance must assume. This shape may seem to us a distortion, but in recognising appearance we are in touch with reality, and practical interest is the key that opens to us the interpretation of intellectual experience. And it is not only by the intellect that we interpret the nature of reality, for besides logic there is life, and in life we directly perceive the reality that in logic we think about.

The intellect, then, does not make truth, neither does it make reality; it makes reality take the form of spatial things, and it makes things seem to be the ground of reality. Were our nature not intellectual, if all consciousness was intuitive, the world would not then appear as things—there would be no things. But, notwithstanding that our world is an illusion, it is not the less on that account a true world, and our science is true knowledge, in the objective meaning of truth, for

once an illusion is interpreted, it becomes an integral part of the conception of reality. It would be easy to find abundant illustration of this fact within science itself. Thus in the familiar case of the straight stick which appears bent when partly immersed in water, as soon as the illusion is understood as due to the different refraction of light in media of different density, air and water, it ceases to be an illusion. We then recognise that if a partly immersed stick did not appear bent, it would really be bent. Again, the illusion that clings to us most persistently throughout our experience is that which is connected with movement and rest. The system of movement in which we are ourselves carried along appears to us stationary, while that which is outside it seems alone to move. In very simple cases, such as viewing the landscape from a railway-carriage window, habit has long caused the illusion to cease, but we all remember the child's feeling that the trees and fields were flying past us. The earth's motion never becomes to us a real experience of movement, we accept the fact and never doubt the scientific evidence on which it rests, yet we always speak and think of sunrise and sunset; and this is not merely due to the accident that our language was fixed before the nature of the celestial movement was known, but to a natural illusion which it is far more convenient to retain than to abandon.

The fact of illusion is not the tenet of any particular philosophy, nor even of philosophy itself; it is a recognised factor in common life and in physical science, but in instancing the theory of Bergson's philosophy I am choosing an extreme case. Berkeley held that illusion is practically universal; Kant taught that the apparent objectivity of phenomena is the form that the understanding imposes on things; but Bergson teaches not only that all material reality is illusion, but also that this very illusion is the work of the intellect, that the intellect is formed for this purpose, intellect and matter being correlative, evolving pari passu. To such a doctrine there is of necessity a positive side, for it is impossible that it can rest on universal scepticismscepticism both of knowledge and of the instrument of knowledge. If the intellectual view of reality as solid matter in absolute space is illusion, it must be possible to apprehend the reality from which the judgment that it is illusion is derived. If the intellect distorts, there must be an intuition which is pure, and the relation between these will be the relation between reality and appearance. Neither, then, is reality truth, nor appearance error. There is a truth of appearance, a truth that is a value in itself, a truth that is more than the mere negation that appearance is not reality. The appearance is our hold upon the reality, our actual contact with it, the mode and direction of our action upon it.

What, then, is error? It cannot consist in the fact that we know appearance only, not reality, for we can only know reality by its appearance. It cannot be an appearance behind which there is no reality, for nonbeing cannot appear. It cannot be nothing at all or pure non-being, for to think of absolute nothing is not to think. In error there is some object of thought which is denied real being. What this is is the problem of error.

# CHAPTER VIII

#### THE PROBLEM OF ERROR

In the *Theætetus* of Plato, Socrates has been discussing with Theætetus what knowledge is, and when at last agreement seems to be reached in the definition that knowledge is true opinion, a new difficulty occurs to Socrates:

"There is a point which often troubles me and is a great perplexity to me both in regard to myself and to others. I cannot make out the nature or origin of the mental experience to which I refer. How there can be false opinion—that difficulty still troubles the eye of my mind. Do we not speak of false opinion, and say that one man holds a false and another a true opinion, as though there were some natural distinction between them ? All things and everything are either known or not known. He who knows, cannot but know; and he who does not know, cannot know. . . Where, then, is false opinion ? For if all things are either known or unknown, there can be no opinion which is not comprehended under this alternative, and so false opinion is excluded."

This difficulty may appear at first sight purely verbal, and we shall perhaps be inclined to see the answer to it in the double use that we make of the word knowledge. We use the word in two senses, in one of which it includes all and everything that is or can be present to the mind in thinking, and in another and narrower sense the word knowledge means truth. It was in the narrow sense of the word that whatever is not true is not knowledge that Socrates interpreted the meaning of the Delphic oracle that had declared him the wisest of men. His wisdom must be, he said, that whereas other men seemed to be wise and to know something, he knew that he knew nothing. All men have opinion, but opinion is not knowledge, though easily and generally mistaken for it. His perplexity was to understand what actually this false opinion could be which passed for knowledge. It could not be nothing at all, for then it would simply mean ignorance; but in false opinion some object is present to the mind. Everything that the mind thinks of has being. A thing may have being that does not exist if by existence is meant the particular existence of an event in time, for most of the things we think about are timeless—they are ideas, such as whiteness, goodness, numbers and the properties of numbers, faith, love, and such-like. All such ideas are called universals, because their reality does not mean that they exist at one particular moment and no other, but they are real, they have being. How, then, can there be anything intermediate between being and not being, anything that is and also is not, for this is what false opinion or error seems to be ?

There is, then, a problem of error, and it is quite distinct from the problem of truth. The problem of truth is to know by what criterion we can test the agreement of our ideas with reality; the problem of error is to know how there can be false opinion. There is false opinion, of this no one needs to be convinced; but where its place is in the fundamental scheme of the mental process, in what precisely it consists, whether it is purely a negation or whether it has a positive nature of its own, this is the problem we have now to consider.

There is an important distinction in logic between what is contradictory and what is contrary. Of two contradictory propositions one must be true, the other must be false; but of two contrary propositions one must be false, but both may be false. Of contradictory propositions one is always a pure negation, one declares the non-existence of what the other affirms the existence; but of contrary propositions each has a positive content, and both may be false. A true proposition may be based on a false opinion, and it is very important to have a clear idea of what we intend by false opinion. We do not mean by false opinion such plainly false

propositions as that two and two are five or that there may be no corners in a square—such propositions are false, because they contradict propositions that are selfevident. If anyone should seriously affirm them, we should not, I think, say that such a one had a false opinion, but that he failed, perhaps through some illusion, to understand the meaning of the terms he was using. An example of what would now, I suppose, be unquestionably regarded by everyone as error is that whole body of opinion that found expression in the theory and practice of witchcraft. This was once almost universally accepted, and though probably at no period nor in any country was there not some one who doubted or disbelieved, still the reasons of such doubt or disbelief would probably be very different from those reasons which lead us to reject it to-day. For witchcraft was grounded on a general belief that spiritual agencies, beneficent and malign, were the cause of material well-being or evil. This conception has now given place to the mechanistic or naturalistic theory on which our modern physical science is based. We interpret all physical occurrences as caused by material agency. But this belief, quite as much as the belief in spiritual agencies, is opinion, not knowledge, and it may be false. It is conceivable that future generations will reject our scientific notions, self-evident though they seem to us, as completely as we reject the notions of the dark ages. It is even conceivable that the whole of our modern science may come to appear to mankind as not even an approximation to knowledge. Error, like illusion, may be universal. No one whose opinion counts as a rational belief now holds that sickness may be caused by the malign influence of the evil eye, and that this influence may be neutralised by making the sign of the cross; some, but very few, believe that a

sick man may be healed by the prayers and anointing of righteous men; many believe that material disease. however malignant, may be expelled from the body by faith; while the majority of rational men, whatever independent religious views they hold, regard sickness and disease as material in the ordinary sense, and expect them to yield to drugs and treatment. Now, of these various opinions some must be false, while all may be false. Let us add some illustrations from philosophy. Some philosophers hold, in common with general opinion, that sense experience is caused by physical objects; others hold that there are no physical objects, but that consciousness is the one and only reality; and there are others who think that the reality that gives rise to our sense experience is neither physical in the sense of a material thing, nor mental in the sense of consciousness or thought, but is movement or change-change that requires no support and is absolute. All these are opinions, and may be false, and our belief that any one of them is true does not depend on immediate experience, but on reasons. The best that can be said in favour of any belief is that there is no reason for supposing it false, and the worst that can be said against any belief is that there is no reason for supposing it true. Our problem, then, is to know what constitutes the nature of error in any one of these examples if it is, as each one may be, false ?

The instances we have given are all of them propositions or judgments, or else conceptions formed out of propositions or judgments, the purpose of which is to interpret experience. The actual experience itself, in so far as it consists of the actual presence of the object to the mind aware of it, is, as we have seen, neither truth nor error; it simply is what it is. It is the conceptions by which we interpret this experience that are true or false. And our problem is that the meaning or content of a conception, that which is present to the mind when we make a judgment, is precisely the same whether the conception is true or false, there is no distinctive mark or feature by which we can know that in the one case the object of thought is a real or actual fact, in the other an opinion to which no reality corresponds. And, further, it seems exceedingly difficult to understand in what way a non-reality can be present to the mind at all.

Let us now examine some attempts to solve this problem, and first of all let us take the pragmatist solution. Pragmatism claims that it has no difficulty in explaining error, because, as we have already seen, it acknowledges no other test or criterion of truth except a pragmatic one. Every proposition or judgment that we make must, in order to have any meaning whatever, be relevant to some human purpose; every such pro-position is a truth-claim; and every truth-claim is tested by its workability. Consequently, error is simply the failure of a proposition to establish its claim by the practical test of working. Propositions marked by such failure are errors. As there is no truth independent of time, place, and circumstance, no irrelevant truth, no truth independent of the conditions under which its claim is put forward, there is no truth that may not become error. No judgment, according to pragmatism, is an error pure and simple-that is to say, it cannot come into existence as error, for it comes claiming truth, and maintaining that claim until challenged; it becomes an error in retrospect only, and always in relation to another judgment which corrects it. Error does not characterise a class of judgments ; it is something that happens to a judgment, it is a judgment whose truth-claim is rejected in reference to another judgment

which succeeds. The essential thing in the pragmatist doctrine of error is that in claiming to be true a judgment is not challenging comparison with some independent reality, nor is it claiming to belong to a timeless order of existence—to be eternal; it is claiming to fulfil the particular purpose for which it has been called forth, whether that purpose be practical or theoretical.

Let us now consider the explanation of error offered by the idealist philosophy. In this view only the whole truth is wholly true; the Absolute, as a perfect, concrete, individual system, is the ideal, and all that falls short of it can only possess a degree of truth-a degree which is greater or less according as it approximates to the ideal. The degrees of truth are not quantitative, not a mixture of truth and error, but a nearer or more distant approach to the ideal. There can be no absolute error, because if truth is the whole, error, if it exists at all, must in some way be included in truth. Clearly error cannot as such be truth, and therefore it must follow that, in the whole, error loses its character of error, and finds reconciliation of its contradiction to truth. Error. then, if it is something, and not a pure negation, is partial or incomplete truth; the perplexity and contradiction that it gives rise to are incidental to our partial view. Knowledge, it must seem to us, can exist only for omniscience. Unless we know everything, we know nothing.

These two doctrines are in a sense the exact antithesis of one another. They agree together in this, that in each the explanation of error follows as a consequence of the conception of the nature of truth. The pragmatist theory implies that there is no truth in any real sense, but only more or less successful error. The idealist theory implies that there is no real error, but only a variety in the degree of truth.

Most people, however, are convinced that truth and error are not related to one another, nor to the circumstances that call forth belief or disbelief. Let us now examine a theory that recognises this. There are false judgments, and they need explanation; error has a nature of its own. If a judgment is false, it is absolutely and unalterably false; if it is true, it is unconditionally true and with no reserve. No logical process, no psychological disposition, can make what is false true. Error must lie in the nature of knowledge, and to discover that nature we must understand the theory of knowledge and determine the exact nature of the mental act in knowing. The first essential is to distinguish the kind of knowledge to which truth and error can apply. We pointed out in the second chapter that all knowledge rests ultimately on immediate experience. In immediate experience the relation between the mental act of knowing and the object that is known is so simple that any question as to truth or error in regard to it is unmeaning. To question the truth of immediate experience is to question its existence; it is to ask if it is what it is, and this is plainly unmeaning. But thinking, we said, is questioning experience in order to know its content or meaning, and in thinking, the simplicity of the relation which unites the mind to its object in immediate experience is left behind, and a logical process of very great complexity takes its place. It is in this complexity that the possibility of error lies.

Let us look at it a little more closely. Knowing is a relation which unites two things, one the mind that knows, the other the thing known. In every act of knowing, something is present to the mind ; if knowing is simply awareness of this actually present something, we call it immediate experience, we are acquainted with the object. But our knowledge is not only of objects

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immediately present to the mind and with which we are therefore acquainted. Knowledge embraces the past and future and the distant realms of space. Indeed were knowledge only of what is actually present to the mind, it is difficult to imagine that we could, in the ordinary meaning of the word, know anything at all. I may be thinking, for example, of an absent friend; all that is present to my mind is, it may be, a memory image, a faint recall of his appearance on some one occasion, or perhaps a recollection of the tone of his voice, or it may be the black marks on white paper which I recognise as his handwriting. This image is present to my mind, but the image is not the object, my friend, about whom I think and make endless judgments, true and false. So also, if what is present to the mind is affecting me through the external senses, if it is a sense impression, it is clear that what is actually present is not the whole object of which I am aware, but only a very small part of it, or, it may be, no part of it at all, but something, a sound, or an odour, that represents it. The immediate data of consciousness are named by some philosophers sense data, by others, presentations, by others images, and there is much controversy as to their nature and existence, but with this controversy we are not here concerned-we are seeking to make clear an obvious distinction, namely, the distinction between knowledge by acquaintance and knowledge by description.

What kind of knowledge is it that we acquire by description ? Knowledge about things with which we are not first acquainted. The most important knowledge that we possess or acquire is knowledge of objects which we know only by the knowledge we have about them—objects that we know about without knowing them. They are not direct impressions on our senses. nor are they ideas known in actual experience. We make judgments about them, and the subjects about which we make these judgments are really composed of these judgments that we make about them. To go back to our illustrations, we may know a great deal about the evil eye, a malignant influence, disease, faith, healing, causality, physical objects, without any acquaintance with them, without even knowing that they exist. Such knowledge is descriptive, and the objects are descriptions. Knowledge by description is never quite simple, and is often very complex, for, besides the relation of the mental act to the object known, there are the terms and relations which are the elements in the judgment and the relations of the judgments themselves. If we analyse a judgment, every word in which it is expressed, whether it is a noun or a verb or a preposition or a conjunction, conveys a distinct meaning, indicates a term or a relation, each of which can be made a distinct object to the mind, and all of which are combined in the single meaning the judgment expresses. It is in this complexity that the possibility of error lies, and the possibility increases as the complexity increases. All the terms and the relations which a judgment contains depend on the knowledge we have by acquaintance-that is to say, we are ultimately dependent on our actual experience for all knowledge whatever, whether it is acquaintance or description, for we can only describe in terms with which we are acquainted; but in the judgment these elements are combined into new objects, or a certain relation is declared to exist between objects, and it is this combination of the elements of the judgment that involves its truth or falsehood.

If this view of the nature of the mental act of knowing is accepted, we are able to understand how false opinion

is consistent with the fact that all knowledge is truth. We escape both the alternatives that seemed to Socrates the only possible ones. "When a man has a false opinion, does he think that which he knows to be some other thing which he knows, and knowing both is he at the same time ignorant of both ? Or does he think of something which he does not know as some other thing which he does not know ?" No. neither ; in error he thinks that something that he knows is in a relation that he knows to some other thing that he knows, when in fact that relation is not relating the two things. The false proposition is not one in which the constituent terms and relations are unknown or non-existent, but one in which a combination of these terms and relations is thought to exist when in fact it does not exist ; and the true proposition is that in which the combination thought to exist does exist. We can, therefore, if this account be true, at least know what false opinion or error can be, whether or not we have any means of deciding in regard to any particular opinion that it is false.

There is one other theory, the last we shall notice. It is in one respect the most important of all, namely, that it is the most direct attempt to grapple with the problem of error. It is founded on a theory of knowledge which we owe mainly to the profound and acute work of a German philosopher (Meinong), and which at the present time is being keenly discussed. It is an attempt to determine more exactly than has yet been done the fundamental scheme of the mental life and development. The brief account that I am now offering, I owe to a paper by Prof. G. F. Stout on "Some Fundamental Points in the Theory of Knowledge." We have seen that the problem of error is the difficulty there is in conceiving how there can be any real thing, any real object of thought, intermediate between being and notbeing. Error seems to exist and yet to have a nature which is a negation of existence, and it seems therefore to be a downright contradiction when we affirm that error or false opinion can be-that there is a real object of thought when we judge falsely. This theory meets the difficulty directly by distinguishing in the mental act of knowing a process that is neither perceiving nor thinking of things, and that involves neither believing nor disbelieving on the one hand nor desiring or willing on the other : this is the process of supposing. Corresponding to this mental act of supposing, there is a distinct kind of object intended or meant by the mind -an object that is neither a sense datum nor an idea, nor a judgment, but a supposition. Also and again corresponding to this mental act of supposing and its intended object the supposition, there is a mode of being which is neither existence nor non-existence, but is named subsistence. A supposition, it is said, does not This thesis, it will easily be underexist-it subsists. stood, is based on an analysis, and deals with arguments that touch the most fundamental problems of theory of knowledge. Moreover, its presentment is excessively technical, and only those highly trained in the habit of psychological introspection and skilled in philosophical analysis are really competent to discuss it. It is not possible to offer here anything but a simple outline of the part of the theory that concerns the present problem. The actual experience of knowing is a relation between two things, one of which is a mental act, the act of perceiving or thinking or having ideas, and the other is an object, that which is perceived or thought of. The act is a particular mental existence, it is the act of a psychical individual. The object is not included within the actual experience which is the knowing of it, it is

that which is meant or intended by the experience. The act, then, is the mental process of meaning or intending, the object the thing meant or intended. The mental act differs according to the kind of object intended. The act of perceiving is the direction of the mind towards sense data and ideas; the act of judging is the direction of the mind towards judgments or propositions about things, propositions that affirm or deny relations between things; the act of supposing is different from both these—it is the direction of the mind towards suppositions. Suppositions differ from ideas in this, that they may be either positive or negative, whereas ideas are never negative. This may seem to contradict experience. Can we not, for example, have an idea of not-red just as well as an idea of red ? No, the two ideas can easily be seen to be one and the same; in each case it is red we are actually acquainted with, and the difference is in affirming or denying existence to the one idea. The difference is in our judgment, which may be affirmative or negative. A supposition is like a judgment in this respect ; it may be either affirmative or negative, but it differs from a judgment in another respect, that while a judgment always conveys a conviction, always expresses belief or disbelief, a supposition does not-it is neither believed nor disbelieved.

Before I show the application of this analysis of knowledge to the problem of error, let me try and clear up its obscurity, for undoubtedly it is difficult to comprehend. Its difficulty lies in this, that though all the ideas with which it deals are quite familiar—suppositions, real and unreal possibilities, fulfilled and nonfulfilled beliefs—yet it seems to run counter to all our notions of the extreme simplicity of the appeal to reality. It seems strange and paradoxical to our ordinary habit

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of thinking to affirm that there are real things and real relations between things which though real yet do not exist, and also that non-existent realities are not things that once were real but now are nought-they are things that subsist. Yet this is no new doctrine. The most familiar case of such realities is that of numbers. The Greeks discovered that numbers do not exist-that is to say, that their reality is of another kind to that which we denote by existence. Numbers are realities, otherwise there would be no science of mathematics. Pythagoras (about 540-500 B.C.) taught that numbers are the reality from which all else is derived. And there are many other things of the mind that seem indeed to be more real than the things of sense. It is this very problem of error that brings into relief this most important doctrine.

Now let us apply this theory of the supposition to the problem of error, and we shall then see how there can be an object present to the mind when we judge falsely, and also that the object is the same whether we judge truly or falsely. Suppositions are real possibilities; they are alternatives that may be fulfilled or that may never be fulfilled. These real possibilities, or these possible alternatives, are objects of thought; they do not belong to the mental act of thinking; they are not in the mind, but realities present to the mind. In mere supposing they are present as alternatives; in judging, we affirm of them or deny of them the relation to general reality that they are fulfilled. Judgments therefore are true or false accordingly as the fulfilment they affirm does or does not agree with reality. In this way, then, we may answer the perplexing question, How can there be an object of thought in a false judgment? The answer is, that the objects of thought about which we make judgments are suppositions, and our judgments

concern their fulfilment, and their fulfilment is a relation external to them—it is their agreement or disagreement with reality.

## CHAPTER IX

#### CONCLUSION

I WILL now briefly sum up the argument of this book. The problem of truth is to discover the nature of the agreement between the things of the mind, our ideas, and the reality of which ideas are the knowledge. We call the agreement truth. What is it ? We have seen that there are three different answers, namely—(1) That it is a correspondence between the idea and the reality; (2) That it is the coherence of the idea in a consistent and harmonious whole; and (3) That it is a value that we ourselves give to our ideas.

The theory that truth is correspondence we found to offer. this difficulty. To say of an idea that it corresponds with reality supposes a knowledge of reality in addition to and distinct from the knowledge that is the idea, and yet the knowledge of reality is the idea of it. And if it be said that not the idea but the judgment is what corresponds with reality in truth, this equally supposes a knowledge of reality that is not a judgment. If, as the common sense of mankind requires us to believe, the reality that is known by us exists in entire independence of our relation of knowing to it, how can we state this fact without falling into contradiction in the very statement of it? This is the difficulty of a realist theory of knowledge.

We next examined the theory that truth is coherence, and this seemed to present to us an unattainable ideal. Only the whole truth is wholly true. We followed the idealist argument on which it is based, and this seemed to lead us inevitably, in the doctrine of the Absolute, to the paradox that unless we know everything we know nothing.

In pragmatism we met a new principle, the proposal to regard truth as a value. Truth, it is said, is something that happens to ideas; they become true, or are made true. There is no criterion, no absolute standard, independent of ideas to which they must conform if they are judged to be true. The value of an idea is its practical usefulness as tested by its workability. Truth is what works. This led us to criticise the concept of utility. We found that it is impossible to identify utility with truth even if we include theoretical utility in its widest meaning, because over and above the usefulness and workability of an idea there always remains the question of its relation to reality. But we recognised in the principle of truth-value an important advance towards a theory of knowledge.

The solution of the problem of truth, it became clear, must be sought in a theory of knowledge. Have we, in the new theory of life and knowledge of Bergson's philosophy, an answer to the question, What is truth ? Yes, but not in the form of a direct solution of the dilemma which confronts us in every theory that accepts the independence of knowledge and reality rather in a theory of knowledge in which the dilemma does not and cannot arise.

The theory of Bergson is that in the intuition of life we know reality as it is, our knowledge is one with our knowing; and in the intellect we possess a mode of knowing which is equally immediate but the essential quality of which is that it externalises or spatialises reality. We understand this mode of knowing in recog-

nising the purpose it serves, its practical advantage to us. The theory, therefore, resembles pragmatism in bringing the concept of utility to the aid of its theory of knowledge. But, we insisted, the resemblance is outward only, for the essential tenet of pragmatism, that truth itself is a value, is fatal to the theory. It would mean, in fact, that not the mode of knowing, that is the intellect, but the actual knowledge itself is a practical endowment. But the problem of truth arises in a new form, for the practical utility of the intellect consists in the illusion which it produces in us. It makes the flowing reality appear as fixed states. How, then, can universal illusion be consistent with the possession of truth? To answer this question we examined the nature of illusion and its distinction from error.

In the last chapter we have dealt with the problem of error. The fact of error presented a difficulty distinct from the question, What is truth ? for it implied a real object of thought, of which it seemed equally contradictory to say that it exists and that it does not exist. In the solutions that have been proposed we saw how the problem is forcing philosophers to examine again the fundamental processes of the mind and the nature of the universe they reveal.

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THE *Thecetetus* of Plato is an exposition of the problem of truth and error as it presented itself in ancient philosophy. The quotation I have made from it, and also the quotations from the *Republic*, are from Jowett's translation.

The most clear exposition of what I have called the realistic doctrine is *The Problems of Philosophy*, by the Hon. Bertrand Russell, in the Home University Library (Williams and Norgate). I have adopted Mr. Russell's terms, "acquaintance" and "description"; the distinction they denote seems to me of fundamental importance, and Mr. Russell's doctrine on this point a permanent addition to philosophy. Mr. Russell's theory, that in the judgment what is present to the mind is a relation which is external to the terms of the judgment, and that agreement or disagreement between this relation and reality makes the truth or falsehood of the judgment, can only be appreciated if studied in connection with his general scheme.

The classical work on what I have called the modern idealist doctrine (I have avoided the word intellectualist) is Mr. F. H. Bradley's *Appearance and Reality*. I have attempted to give the main lines of the theory in my chapter on "The Absolute." Although it is a book for advanced students, it is not a closed volume even to the uninstructed. The brilliant dialectical skill of the author is acknowledged and may be enjoyed by those who reject or may fail to understand his conclusion. Mr. Harold H. Joachim's *The Nature of Truth* (Oxford, Clarendon Press) is a most able and scholarly argument for the coherence theory of truth.

The principal expositions of Pragmatism are the works of William James and of Dr. F. C. S. Schiller. William James' *The Will to Believe* was the first distinct formulation of the principle. *Pragmatism, a New Name* for some Old Ways of Thinking, is the fullest and most systematic statement of the doctrine. *The Meaning* of *Truth* is a defence of the doctrine against the criticism that had been meted out to it unsparingly. All three books are published by Longmans.

Dr. F. C. S. Schiller is uncompromising in his advocacy of a complete return to the doctrine taught in the ancient world by Protagoras. He has defended that philosopher against the arguments of Plato in a polemical pamphlet entitled *Plato or Protagoras?* (Oxford, Blackwell). An Essay on "Axioms as Postulates" in *Personal Idealism* (Macmillan & Co.), and two volumes of collected essays on *Humanism* (Macmillan & Co.), set forth the doctrine, which he prefers to call Humanism, with great force, abundant illustration, and the relief of no small amount of humour.

For an account of the theories of Bergson, I may mention my own little book in this series, *Henri Bergson*: *The Philosophy of Change*. M. Bergson's books are *Time* and Freewill, Matter and Memory, and Creative Evolution. To these has been recently added An Introduction to Metaphysics (Macmillan, 1912). It is the republication in English of an article written in 1903, which has been for a long time out of print. It is a short and clear statement of the doctrine of Intuition.

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